

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.







OCTOBER

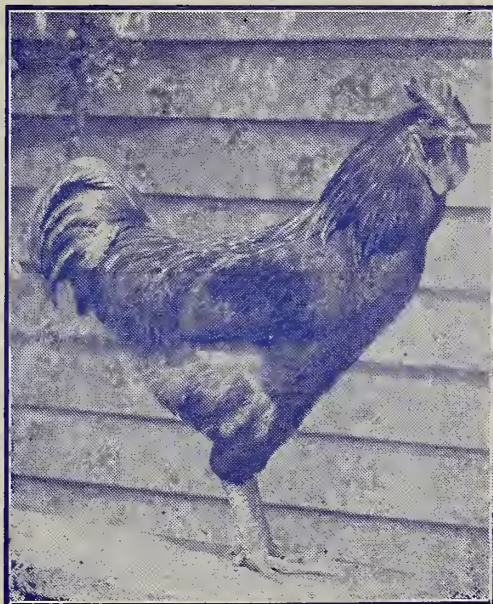
1912

ONE YEAR 50¢.

THREE YEARS \$1.29

# THE INDUSTRIOUS HEN

A MONTHLY MAGAZINE  
FOR THE  
COMMERCIAL AND FANCY POULTRYMAN



RHODE ISLAND RED  
Property of A. J. Stanbery, Newport, Tenn.

THE INDUSTRIOUS HEN CO.  
PUBLISHERS  
KNOXVILLE TENNESSEE



# SAVE HALF YOUR MONEY

## JOIN OUR BUYING CLUB

### Buy Your Goods at Wholesale

# Send 50c

FOR MEMBERSHIP

### Testimonials

August 6, 1912.

I can give you no stronger endorsement of your co-operative method of buying than by listing herewith articles I have purchased through your company and giving at the same time my estimate as to the savings I made:

	Cost	Saving
Pongee Coat .....	\$12.50..	\$ 5.50
Groceries .....	60.00..	15.25
Silk .....	5.80..	1.70
Silk Serge .....	6.30..	3.80
Silk (Dress) .....	32.00..	8.00
Blanket .....	2.89..	1.25
Hosiery .....	4.50..	1.50
Ladies' Hat .....	5.00..	5.00
Silk Lining .....	5.33..	2.67
Velour Coat .....	24.75..	11.25
Silk Hose .....	4.25..	1.75
Blankets .....	7.00..	3.00
Blankets .....	8.00..	3.50
Man's Suit .....	24.00..	11.00
Ladies' Coat .....	17.50..	12.50
Hosiery .....	13.00..	4.00
Linens .....	12.50..	2.50
Man's Suit .....	14.00..	6.00
Lady's Suit .....	27.50..	22.50
Fox Muff .....	30.00..	20.00

\$316.82 \$142.67

Certificate No. B344.

June 22, 1912.

My suit of blue serge purchased last Fall has been very satisfactory. It has kept its shape well and has been considered a very stylish suit. The price was \$18, and it was certainly equal to any \$25 suit I ever purchased.

Certificate No. C158.

6-21-12.

Myself and family are perfectly satisfied with your co-operative plan. My daughter purchased a coat for \$18.75 which she could not duplicate in the department stores less than \$25.

On a bill of \$144 we have saved \$36.

Certificate No. C2751.

June 22, 1912.

My coat, purchased for only \$10, a saving, I know, of at least \$15, as the same thing could not be purchased at other shops for less than \$25, has been and is most satisfactory. It is of good style and excellent material and I am well pleased with it. I gladly add my testimonial as to the reliability of goods purchased from the World Home Supply Company.

Certificate No. C158 A.



### Free to Members

The services of Twenty Resident Buyers right in the heart of the New York market, also this handsome loose-leaf catalogue, containing between 200 and 300 pages of Groceries, Drugs, Toilet Preparations, Dry Goods, Suits, Raincoats, Rubbers, Gloves, Neckwear, Hosiery, Jewelry, Blankets, Umbrellas, Household and Dress Linens, Ribbons, Furniture, Rugs, Gas and Electric Fixtures, Furnaces and Stoves, Plumbing Necessities, Auto Supplies, Pianos, etc.

### Free to Anybody

Send for our World Home Supply Co. Booklet; tells about the organization and how it saves money for members; contains testimonial letters from satisfied men and women. Read it—it will induce you to become a member.

### Agents Wanted

In all parts of the country. Liberal commission. Excellent pay. Permanent positions. Write for full information.

#### EXECUTIVE STAFF OF THE WORLD HOME SUPPLY COMPANY

WILLIAM H. SHRADER, President and General Manager  
E. A. LYON, Vice-President  
JACOB RYERSON, Secretary

General Supt.....F. N. GIFFORD  
Publicity Dept...GEN'L COUNSEL M. M. GILLAM  
Catalogue Department.....JAMES WILDAY  
Chief Mdse. Dept.....C. C. ROSSIRE  
Asst. Chief Mdse. Dept.....E. A. REPPLIER  
Educational.....MADISON C. PETERS  
Lectures.....WILLIAM C. STINSON

#### Department Managers

Mailing Department.....WM. F. RYERSON, JR.  
Correspondence Department....ANNA R. TINKER  
Accounting Dept....COMPTROLLER H. W. UTTER  
Bureau of Adjustments.....J. C. BURKHARDT  
Record Department.....H. CUMMINGS  
Legal Department.....C. H. FAY  
General Order Department.....E. R. SHRADER

**WORLD HOME SUPPLY CO.,**

143 W. 36th Street  
NEW YORK

# SECRETARY'S ENTRY BOOK

A very compact book, size 8½x8½ inches, giving ample space for making entries without crowding. Printed on best quality paper and handsomely bound. Our simple labor-saving system of special indexing is a feature that adds much to the book and affords a great saving of time in making entries. 50 Leaves \$1.00; 100 Leaves \$2.00. : :

**THE INDUSTRIOUS HEN CO. : : Knoxville, Tennessee**



CONTENTS FOR OCTOBER, 1912

TWICE TOLD TALES..... 141

GREETING TO AMERICAN POULTRY ASSOCIATION..... L. B. Audigier..... 143

AMERICAN POULTRY ASSOCIATION CONVENTION..... E. H. DePoy..... 144

EFFECT OF PRESENT METHOD OF HANDLING EGGS..... Pennington and Pierce..... 147

PREPARING FOR INAUGURATION OF PARCELS POST..... E. H. DePoy..... 152

ASSOCIATE EDITOR TO ENTER NORTHERN FIELD..... 152

A. P. A. NOTES AND COMMENTS..... Associate Editor ..... 153

POULTRY DISEASE DEPARTMENT..... J. A. Thornhill..... 155

POULTRY SHOWS AND ASSOCIATIONS..... Jas. B. Dismukes..... 158

SPECIALTY CLUBS AND ASSOCIATIONS..... 160

OUR BREEDERS AND THEIR BIRDS..... 163

WATER FOWL AND TURKEYS..... 164

NOTHING BUT FACTS..... J. A. Thornhill..... 166

CHICKEN-POX ..... 168

SKIM MILK FOR YOUNG CHICKENS..... 168

Aldrich White Orpingtons

THE WINNING STRAIN



If you wish to WIN at your show this season we will furnish you birds good enough for the STRONGEST COMPETITION and condition them free of charge at prices as low as possible for such quality. Or, we can furnish you utility stock of strictly HIGH QUALITY and at very moderate prices.

Our foundation stock was purchased from the leading breeders of England, Canada and the United States and were all selected by our manager, Mr. Geo. J. May, the most experienced breeder of White Orpingtons in the United States. Our winnings of 51 prizes out of a total of 150 at last season's exhibitions at St. Louis, Pittsburgh, Chicago, Baltimore, Cleveland and MADISON SQUARE GARDEN, prove the Superior Quality of our stock.

Our English birds are from the best known English Farms, especially selected so as to be free from minor defects so often found in imported birds, while having the weight, strength of bone and purity of color in which they excel. Our young stock sired by these prize winning birds is reared and fed according to English methods and in strength of bone, color and weight equal the best English birds of the same age.

Send for our catalogue describing the QUALITY WHITE ORPINGTON FARM of America and place your order early so we can reserve you a winner for your show.

Aldrich Poultry Farm

6080 N. HIGH ST. : COLUMBUS OHIO

WHITE WYANDOTTES AT SPECIAL SALE PRICES

J. C. FISHEL & SON : : Box H, Hope, Ind.



# Barred Plymouth Rocks

**WINNERS** at Louisville, Frankfort, Owensboro Shows, and Kentucky State Fairs. 1st Cockerel, 1st Hen, 1st Pen, 2nd Pullet, 3rd Cock, 3rd Hen, 4th Cock, 4th Hen, 4th Cockerel, 4th Pullet, cash prize for best Pen, Louisville Poultry Show Jan. 19, 1911. 1st Pullet, 2nd Pullet, 2nd Hen, 2nd Cock, 3rd Cockerel, cash prize for best Barred Plymouth Rocks, Kentucky State Fair, Sept. 12, 1910. 1st Cock, 1st Cockerel, 1st Pullet, Frankfort, Sept. 1909. 1st Hen, 1st Pullet, 2nd Cockerel, 3rd Cock, 3rd Cockerel, 3rd Pullet. Cash prize for best Barred Plymouth Rocks, Kentucky State Fair, 1909. 1st Pullet, 1st Hen, 2nd Hen, 3rd Cock, 3rd Cockerel, 4th Cockerel, 4th Hen, 4th Pullet. Special for best shaped female, silver cup for best Barred Plymouth Rocks, Louisville Poultry Show, Dec. 1909. All firsts, Owensboro, Oct. 1909. 1st Cockerel, 3rd Pullet, 3rd Cock, 4th Cockerel, 4th Hen, 4th Pullet, 5th Hen, 5th Pullet. Blue Ribbon for best display. Cash prize for best Barred Plymouth Rocks, Kentucky State Fair, Sept. 1911.

**Breeding Cockerels \$3.50—Pullets \$2.50**  
**Exhibition Males \$12.50—Females \$10**

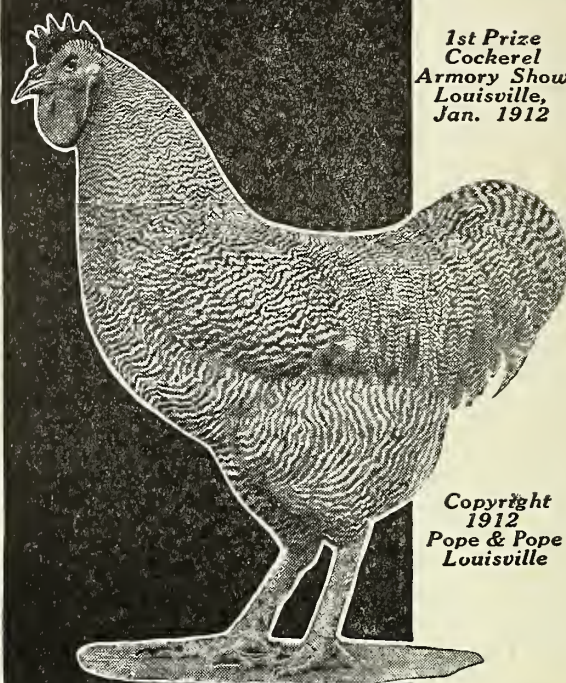
**Incubator Eggs \$1.50 per 15—\$7.50 per 100**

As splendid as have been our birds in the past, this season they are the height of perfection—in the new type—the correct type—the Pope type, of clear, distinct, black and white barring. No other breeder can give you such quality in color and markings as we can. We are specialists in Barred Rocks, have bred them successfully for twenty-one years, and when you buy Pope strain, you buy birds so good that they are in a class by themselves.

**EXHIBITION BIRDS.** We do a large business; we furnish MORE WINNERS TO OUR CUSTOMERS than perhaps any breeders in America. Our low prices secure for us more orders than we can take care of and our FINE, LARGE, MAGNIFICENT BIRDS, absolutely guaranteed, win the blue for those that buy them. Give us a trial, we can please you, we can please anyone.

**BREEDERS.** Buy your breeders from us. We have on range 1800 early hatched birds raised direct from our PREMIUM AND PEDIGREE PENS, bred to perfection in shape and color, large, healthy, vigorous, and we will send you the kind of stock you need to build up and strengthen your flock. Our unlimited facilities for hatching and raising Barred Plymouth Rocks ENABLES US TO GIVE YOU SELECTION NO SMALL BREEDER CAN POSSIBLY DO. A choice breeding or exhibition pen bought from us will do you more good than DOUBLE OR TRIPLE THE MONEY SPENT ELSEWHERE.

**POPE & POPE, Cat. 7, Box H, Louisville, Kentucky**



1st Prize Cockerel Armory Show Louisville, Jan. 1912

Copyright 1912 Pope & Pope Louisville

## S. C. WHITE LEGHORNS

THAT LAY, WEIGH AND WIN

There is as much difference existing between the breeds and strains of our poultry as among cattle. Our dairies raise cattle for the milk. The vast ranches of the West raise cattle for their marketable value in meat. POULTRY is different, for why should we sell a hen at three or four months old simply for her meat when the average GROVE'S STRAIN OF SINGLE COMB WHITE LEGHORN hens will lay twelve dozen eggs per year, which at 20c per dozen, amounts to \$2.40. Her marketable value at three or four months would only have been, probably, 40c. The same hen at the end of her laying season, is worth 60c to 70c in the market, making her worth a total of \$3.00. She will have cost in feed only \$1.10. Where, and in what other breed, can you realize \$1.90 clear profit upon an investment of \$1.10? Our 64-page Catalogue will be sent postpaid for 50c in stamps, which describes breeding, incubating, conditioning, etc., not scientifically, but by the common sense and nature method of raising poultry.

**MY SIGNATURE ON EACH AND EVERY EGG YOUR PROTECTION**

Don't start until you are sure you are right.  
 If you do you'll fail, try as hard as you might.  
 If you raise poultry why not raise the best?  
 Breed the E. W. Grove strain and watch the nest.

**E. W. GROVE, Jr.,**

: :

**R. F. D. No. 1, Clayton, Mo.**

WE ENVY NO MAN HIS ACCOMPLISHMENTS, FOR THEY ARE FOR BETTER POULTRY.

Life Member American Poultry Association.

Life Member National S. C. White Leghorn Club.

## White PLYMOUTH ROCKS

Am now offering choice cockerels at \$2 and \$5 each. These cockerels are very high class and great bargains. They were hatched in March and April. Book orders now for future delivery

**SHEPHERD POULTRY FARM, Quintus Shepherd, Prop., Shepherd, Tenn.**

SEND FOR **Fishel's Special Sale List of White Wyandottes**  
**J. C. FISHEL & SON : : Box H, Hope, Ind.**



# HOUDANS

Southern bred. My birds took first at Alabama State Fair, also Birmingham Winter Show. Eggs for hatching for sale. Fertility guaranteed.

W. J. ROOT, Ensley, Ala.

# Kilman's S. C. Reds

Have stood the test at the strongest competition in the best Southern shows, and have never been defeated. Victors at Memphis, Little Rock, Ft. Smith, Pine Bluff, and Hot Springs. Two hundred early chicks for sale. Breeders at bargain prices. Satisfaction or no trade.

W. F. KILMAN

Bald Knob, Ark.

# Rhode Island Reds

SINGLE AND ROSE COMBS

Write for mating list. Eggs at half price until August 1st.

MONTE SANO POULTRY YARDS, Augusta, Ga.  
M. H. MORRIS, Manager

# Black and White Minorcas

OVERSTOCKED on the BEST in the South. Sacrifice prices on old and young stock. Show winners at real bargains. Buy quick and get the best choice.

MRS. JNO. M. GRISSIM, R. 2, Lebanon, Tenn.

BARRETT'S BLUE RIBBON STRAIN

# Mottled ANCONAS

I have a nice lot of Breeders for sale, at just half price. Five Toulouse Geese and three ganders for \$8.00. Write me.

L. M. BARRETT, Morristown, Tenn.

# White WYANDOTTES

J. G. ROBBINS, Mayfield, Kentucky

# S. C. R. I. REDS and BARRED ROCKS

Best stock, strong, vigorous, farm-raised  
Eggs, \$1.50 per 15.

Indian Runner Duck eggs, \$1.00 per setting.

A. S. BELL, Route 13, Knoxville, Tenn.

# WHITE PLY. ROCKS

The great show and utility strain that has been winning for me, and continue all over the country. I have been breeding this strain for 20 years. There isn't any better. Write your wants.

JOHN LANDIS, Edinburg, Ind.

# S. C. BUFF and WHITE ORPINGTONS

A select lot of breeding hens at \$2.00 up, pullets at \$2.50 to \$5.00 each, Cockerels \$1.00 to \$5.00, from prize winners.

H. S. THOMAS, Route 2, Georgetown, Ky.



# Twice Told Tales

## The Fowl's Stomach.

There is a popular misapprehension as to the position of the fowl's stomach. The alimentary canal commences with a food pipe at the back of the mouth, runs through the neck to a portion termed the first stomach, or crop, which is an enlarged pouch enclosed by membranous walls. The chief stomach is, however, found just above the gizzard, and appears only like a small swelling on the canal, and opens into the gizzard. The latter is a large, hard organ, having thick muscular walls. It is a powerful mill for grinding up all food, and in it the chymification of food partaken of is completed for proper assimilation into the fowl's system, proving the absolute necessity of a regular supply of good sharp flint grit. —London Telegraph.

## Good Demand In Australia.

From all points of the compass letters come to us from our advertisers reporting a brisk demand for stock and eggs. They say the call for eggs and baby chicks is going to beat all records this year. Of course, there are a few exceptions. When it rains pudding some fellow's dish is sure to be bottom side up. But in the main the poultry trade is moving along at a lively gait.—Australian Hen.

## Not What It Seems.

In the country of Somerset, England, there is a village called Hatch. The clergyman in an adjoining parish was named Duck. One Sunday morning the congregation at the latter place being assembled the curate did not appear. The "clerk" rose and said:

"I hereby give notice that there will be no service today, as Mr. Duck has gone to Hatch." —Exchange.

"I expect to pass through this world but once; if, therefore, there be any kindness I can show, or any good thing I can do my fellow-being, let me do it now; let me not defer, nor neglect it, for I shall not pass this way again."—R. L. Stevenson.



# BUFF AND WHITE WYANDOTTES

S. C. LEGHORNS. Prize winning stock and eggs for sale. Write for catalogue.

## SQUARE DEAL POULTRY FARM

Box J : : Maysville, Kentucky

# CLOSING OUT!

Our entire stock of W. P. Rocks, Pekin Ducks and Carneaux Pigeons. In addition will rent plant, incubators, etc. A good chance for the right party. We invite you to call and look it over.

## COXYETTA POULTRY FARM

Box No. 64 Massillon, Ohio

# INDIAN RUNNER DUCKS

One Dollar each. Year old. Send order for stock at once. White Orpingtons at bargain prices.

MUNNIMAKER POULTRY FARM  
NORMANDY, TENN.

## Wolfe's R. I. Reds and White I. R. Ducks

BEST EXHIBITION QUALITY. Fairest prices for High Quality to be found in America. Eggs now at half price. EXHIBITION BIRDS A SPECIALTY. Breeding stock for sale. Write for prices. CLINCHFIELD POULTRY YARDS, box 92. Rogersville, Tenn.

# EGG LABELS

Printed same day order is received. Get samples and prices.

S. B. NEWMAN & CO.  
KNOXVILLE, TENN.

# White ORPINGTONS

(JACKSON STRAIN)

Eggs and Stock for Sale.

HARRY CALLICOTT, Coldwater, Miss.

# CRYSTAL WHITE ORPINGTONS BARRED ROCKS

THE LAYING AND WINNING KIND. Special bargains for early buyers. Shall be pleased to make you prices.

C. A. MOXLEY, Box H, Taylorsville, Ill.

# Printing For Poultrymen

We are prepared to fill all orders from poultrymen for printing. If you want your work illustrated we have the cuts. Write for prices.

## S. B. NEWMAN & CO.

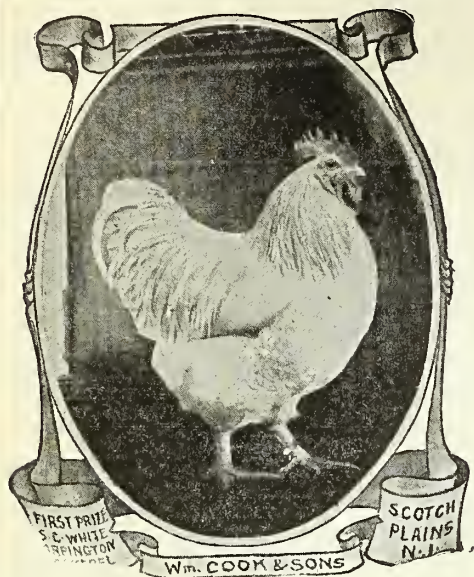
617 Gay St., Knoxville, Tenn.

# S. C. Brown Leghorns Columbian Wyandottes

Prize winners, wonderful layers and beautiful plumage. Stock and eggs, prices reasonable. Send for mating list.

STURTEVANT BROS., Box H, Kushla, Ala.





# WM. COOK & SONS

ESTABLISHED 1873

ORIGINATORS of all the

## ORPINGTON FOWLS AND DUCKS

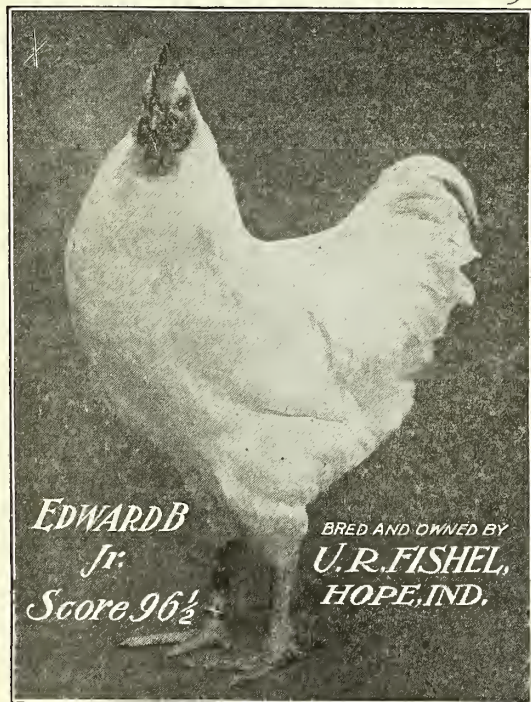
Box H : : SCOTCH PLAINS, N. J.

EVENTUALLY, if after the best Orpingtons, all varieties, you will send to their ORIGINATORS. WHY NOT NOW? and avoid loss and disappointment; we GUARANTEE safe delivery and SATISFACTION which is backed by a REPUTATION of thirty-nine years standing, THIS MEANS MUCH TO YOU. We are not here today and gone tomorrow as some breeders have been and are doing. Then EXPERIENCE counts, surely we should understand ORPINGTONS BETTER than a man who has had them just a year or two.

We MADE the Orpingtons, all of them, and are RECOGNIZED HEADQUARTERS for the best. A VISIT to our plant, where you are CORDIALLY welcomed, will prove this, as well as our THIRTEEN THOUSAND first prizes, and our winning 103 firsts and 72 seconds at Madison Square in six showings, MORE than eight times as many firsts as any other Orpington breeder.

We can supply on the same day as order is received, or will keep and train your birds for you, the FINEST line of EXHIBITION BIRDS that we have ever had. IMPORTED birds from our ENGLISH PLANT, the finest Orpingtons that were in England before our MR. P. A. COOK personally selected them for the AMERICAN requirements, which English breeders do not know. Or AMERICAN bred birds from our MANY AMERICAN WINNERS, sons of our first prize Madison Square White, Buff Black and Jubilee Orpington cockerels. NOW is the time to enquire and order your show birds. We supplied twenty times more first prize winners than any other breeder last season. Do not forget the \$50 CUPS WE GIVE which only our customers can compete for. It pays to own COOK ORPINGTONS. ASK THE PEOPLE WHO OWN THEM. SEND 10c FOR ILLUSTRATED CATALOG containing history of the Origination of the Orpingtons, and hints on Poultry Keeping. Show season of 1913, we won two firsts on two entries at Atlantic City, first White and first Black Orpington pens.

Pens are now mated up for our Southern business and EGGS can be supplied from our WINNERS and the FINEST ORPINGTONS in the world for \$20 a setting, and from fine stock at \$10 a setting. Advice free. Inspection invited. Trains met. Cook's Roup and Worm powder, and also Laying and Condition Powder for sale. The best that exists. Ornamental Land and Water Fowl for sale.



## HOW EASY TO WIN

When you have birds that are of the type and quality that it takes to win. For years we have supplied the winners at most all important Southern Shows and this season we have more and better early hatched birds than ever before.

### WITH Fishel's White P. Rocks

it is an easy matter to win, not only the regular prizes but all specials. Write us your wants please. Send 25 cents for 64-page Catalogue, worth dollars to any one interested in poultry.

U. R. FISHEL, Box H, Hope, Ind.

SPECIAL SALE LIST FREE

## HILLCREST FARMS

Exhibition birds for any show. BARRED ROCKS, PARTRIDGE ROCKS, SILVER CAMPINES. Pens, trios and single birds.

WM. FOTTERALL, Prop., : : : OAKFORD, PA.



# THE INDUSTRIOUS HEN

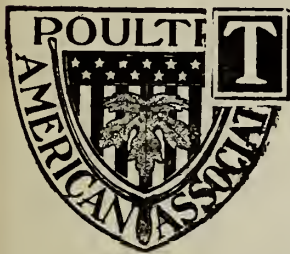
Vol. 9

Knoxville, Tenn., October, 1912

(Whole No. 101) No. 5

## Greeting to American Poultry Association

By L. B. AUDIGIER, Managing Editor



TO THE members of the American Poultry Association in session at Nashville, Tennessee. Ladies and Gentlemen: As an humble observer from foreign lands allow me to congratulate you on the acquisition of so courageous, earnest and honorable body of officers as you are honored with today. We should take into consideration their high

standard of character, their sacrifice of time and means to serve in the capacity to which you have invited them, and their unquestioned loyalty to the science of improved poultry culture in America.

They have accepted the duties you have placed upon them with the desire that the largest live stock association in the world may accomplish the greatest good by exemplifying the fact that the despised hen, for her size and weight, is the greatest money producer on earth.

They have taken this herculean task upon their shoulders to demonstrate a fact, to uplift mankind and to ameliorate our condition. We should make this burden light and help them to assist us by co-operating with them in every way possible to accomplish the results for which they have so thoughtfully planned and devised. Your actions are being observed abroad as well as at home, and what is accomplished at this meeting will be taken up by those interested in foreign lands and culled until only the best that has been done may be preserved.

I was surprised a few months ago when in Rome, in calling upon the Secretary to the Minister of Agriculture of Italy, to find in his possession most courteous letters from President Hicks, and Secretary Campbell, the latest edition of the Standard and the proceedings of the Denver meeting. These men in Italy have neither poultry organizations nor Standards, but they are interested. The State has appropriated large sums and appointed committees to study conditions and they are looking to the American Poultry Association for guidance. You are doubtless astonished, as I was, that no efforts have been made to improve the primitive conditions of poultry in Italy, the home of our Mediterranean Class. The situation here is about as it was in America twenty-five years ago. But Italy is waking up. She is surprised that we have taken our parent stock from her shores and developed them into the greatest egg-producers of the world,

The King himself is personally interested and is anxious that his subjects should improve their conditions, and has ordered that more soil be cultivated, thereby making themselves more independent and consequently happier and better contented. On every little farm are to be found a bunch of chickens, for no Italian family with even a back lot, can keep house without a few hens. Here, as in America, those "high in authority" are beginning to re-

spect the industrious hen, and efforts are being made to throw around her such environments and place before her such conditions that her real worth may be realized.

My work here has been made quite easy and of much value by letters of introduction from the Bureau of Animal Industry, Agricultural Department at Washington, and



MR. L. B. AUDIGIER

Retiring Vice President American Poultry Association

our association should feel proud that this department is in such close touch with our organization.

In conclusion, I wish to again congratulate you on your choice of officers for the next twelve months; and I wish also to congratulate them on the earnest, honest, progressive body of poultrymen who are represented here at this annual meeting. As a Tennessean I wish to welcome you to our State Capital, the leading city of our Volunteer State, and to express my sincere regrets that it has been impossible for me to be present.

I desire to thank you heartily for your loyal support in 1911, and also for your continued confidence and votes, although not a candidate in 1912. This esteem I shall always cherish, and remember with much satisfaction my official connection with the American Poultry Association.

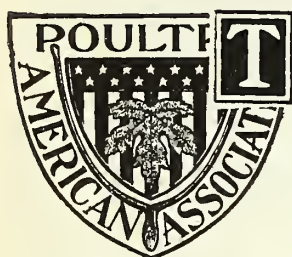






# American Poultry Association Convention

By E. H. DePOY, Associate Editor



THE THIRTY-SEVENTH annual convention of the American Poultry Association, held at Nashville, August 11 to 17, 1912, fulfilled every expectation. The attendance was greater than at any previous convention, splendid interest was manifested, much needed legislation was enacted, and great good accomplished.

Nashville, pre-eminently a convention city, and the center of the greatest poultry producing section in the world, did herself proud in entertaining the greatest convention ever held by the greatest live-stock organization in the world. And Nashville was proud of her guests, the elite of the poultry industry, men and women of culture and refinement, who for one week added polish to this great city, the Athens of the South, with its institutions of learning, of music, of religion, and of art.

The convention commenced at 10 o'clock a. m., in the hall of the House of Representatives at the State Capitol, and was called to order by President Reese V. Hicks, of Topeka, Kansas. The assembly hall was completely filled and many local people occupied the galleries. About two hundred members of the association were present at the morning session.

Before the convention was formally called to order President Reese V. Hicks of Topeka, Kan., gave all representatives of poultry societies, branches and clubs an opportunity to file credentials from the society they represented. The roll call of members was by States, each member rising and giving their names when their States were called, every State except four being represented.

## GOVERNOR HOOPER'S WELCOME ADDRESS.

"All welcomes should be spontaneous and brief. Mine must necessarily be so, owing to the short notice I have had. Prof. Brister had been requested to open this convention with an address of welcome and is now downstairs pouting with a long typewritten speech in his hand.

"A few years ago if this town had been posted with the announcement that the A. P. A. was to hold a national convention here, there would have been a great disturbance. But now we know that no politics will be connected with this poultry convention, and that Democrats, Republicans, Baptists, Catholics, and especially Methodists, will all have their rights respected in its sessions.

"I have a kind feeling for everyone in the poultry business, as back in my barefoot days I spent five years in chicken raising. Mine were not dignified with the name of poultry, being the old-fashioned Leghorn kind that can chase a bug across the desert of Sahara, deposit an egg in a convenient oasis and get back in time for supper. I did not have the modern paraphernalia with which you ladies and gentlemen are blessed. But I did know the business and all from personal contact. I was often the foster-mother of 600 little chicks at one time, and my old gape remedy—a horse hair—is still without an equal.

"I am hoping, after I serve two more years as Governor of this state (applause), to get me a little farm somewhere in the mountains of East Tennessee, and then I'll be just as free and independent as you men and women feel. I can go to bed when the evening shadows fall and get up when the old dominecker rooster in the barnyard begins to crow.

"My address is brief and informal, as all Tennessee welcomes are. Tennessee has done more than any other State in the South and, I believe, in the Union, to build up the Western States from which many of your members

come. Now the trend of immigration is back towards Tennessee. We have the gold of California, the coal of Pennsylvania, the water power of the world. I want to say that you are thrice welcome to Tennessee and its capital. We are greatly honored that this great association has selected Tennessee as the first State in the South in which to hold its convention."

## RESPONSE BY PRESIDENT HICKS.

"I appreciate this great Governor laying down the busy cares of his office to come here and welcome us chicken raisers to this good old Volunteer State. This is truly a great State, and grows practically everything of any other section of the Union. We have met here a great welcome and those who have never before tasted the real old Southern, before-the-war hospitality, can now realize what it means."

The report of election commissioner O. L. McCord was accepted as follows: President, Reese V. Hicks; First Vice-President, S. J. Hopper; Second Vice-President, W. C. Cleckley; Secretary, S. T. Campbell; members of Executive Board, E. E. Richards, L. C. Byce, G. P. Holden, C. P. Van Winkle, L. L. Haggin, Geo. H. Rudy, Rufus Delafield, H. M. Lamon, F. N. Perkins, A. A. Peters, R. E. Bruce, Jno. M. Parker, C. F. Morgan, W. R. Graves.

A committee of five were nominated from the floor to serve as the Board of Review and elected without opposition as follows: A. J. Durr, Tacoma, Wash.; H. G. Spalding, Arkansas; P. M. Wicks, Nebraska; Frank B. White, Chicago; G. A. Guvenator, Virginia. The chair appointed the following members to act as the Committee on Credentials: E. E. Richards, Iowa; H. A. Nourse, Minnesota; Jas. W. Bell, Illinois; U. R. Fishel, Indiana, and R. H. Essex, New York.

At the Monday afternoon session the Executive Board reported that there had been elected to membership during the fiscal year ending July 30, 1912, 1,215 life members to the association and ninety members since the close of the fiscal year.

A number of grievances were submitted to the board and settled satisfactorily in most cases. C. W. Tilford preferred charges against E. B. Thompson and C. H. Wells. All of the parties appeared before the board in person and a full hearing was given the charges. It was the unanimous opinion of the board that the charges were unfounded, and Messrs. Thompson and Wells were exonerated. Then owing to the unfounded charges in connection with judging at the New York and Philadelphia shows, counter-charges were preferred against C. W. Tilford by Mr. Thompson. The latter's charges were sustained by an unanimous vote of the board, and Mr. Tilford was expelled from the A. P. A.

In the case of T. Reid Parrish, of Nashville, and the Columbian Wyandotte Publishing Co., who are charged with an infringement on the copyrights of the association, President Hicks was authorized to procure legal advice to bring action against the incorporation for damages for the alleged infringement. The complaint against T. Reid Parrish was laid on the table for further consideration.

The Executive Board reported charters authorized for state branches in the States of Montana, Florida, Oregon and New Hampshire.

The Finance Committee reported that the books of Secretary S. T. Campbell had been gone over and found correct.

## LICENSES FOR JUDGES.

Licenses were granted to the following new judges:

General—E. T. Jacobs, Columbus, O.; Julius J. Klein, Macon, Ill.; Chas. G. Kinds, Oakland, Cal.; Frank L. Platt,



Toledo, O.; Mrs. Florence Forbes, New Decatur, Ala.; H. B. Lansden, Manchester, Tenn.; Carl Dare, Osceola, Ia.; Joseph Dazle, Richland, Ia.; Oscar E. Miles, Columbus, O.; D. D. Whittaker, Northfield, O.; James E. Greenwald, Milwaukee, Wis.; John C. Snyder, Topeka, Kan.

Special—C. E. Coe, Lexington, O., all varieties except American, Mediterranean and Orpingtons; Thos. H. Woods, Fayette, Mo., Leghorns; E. L. Barrett, Wauseon, O., Rhode Island Reds, Leghorns and Orpingtons; J. C. Punderford, Freneau, N. J., Leghorns, White and Buff Rocks; D. G. Coffman, Josephine, Tex., Rhode Island Reds; Dr. C. S. Jackson, Hayesville, Pa., Orpingtons; M. C. Richardson, Jr., Front Royal, Va., Reds.

The Treasurer's report showed a balance in the treasury of \$16,267.20 on July 30, 1912, about half of which is deposited, bearing interest.

The Association voted unanimously to adopt a market egg and poultry standard, and appropriated whatever amount the committee might need, not exceeding \$5,000. The book will contain about 200 pages and sell for one dollar.

Prof. A. A. Bringham, of Brookings, S. D., addressed the convention on the subject of "Progressive Poultry Culture." He made a plea for the teaching of poultry culture in the normal schools. His address was greatly appreciated.

### WEDNESDAY MORNING SESSION.

After President Hicks had entertained a motion that the convention be resolved into a "shirt-waist" brigade, the third day's session of the American Poultry Association opened Wednesday morning at 9:15.

Owing to the illness of W. Theo. Wittman, chairman of the committee on Show Blanks and Supplies, the report was read by Mr. T. E. Quisenberry. The committee recommended that the A. P. A. issue official show blanks for entry of birds, record books, posters, etc., and charge a profit of not less than 33 1-3 per cent for same. Entry books, blanks, etc., were drawn up by the committee and samples of some of them were exhibited by Mr. Quisenberry. The adoption of these regulation supplies will give a uniform system for conducting poultry shows all over the country, where there is now no system whatever. The motion to adopt the resolution was carried by a vote of 46 to 24.

U. R. Fishel read the report of the Committee on the Plymouth Rock breed standard, setting forth the cost of production of the book and the price at which it must be sold. The cost of publishing the standard will be 30 cents per copy in lots of 10,000, and the committee reported this many copies of the first edition would be sold. A motion was made and carried to table the report of the committee until after the report of the committee on the 1915 standard. The proposed Plymouth Rock breed standard will cost 65 cents per copy, wholesale, and \$1 each retail.

The Committee on Editing and Publishing a Second Edition of the 1910 Standard recommended that an edition of 25,000 copies be issued, and set forth a large number of changes needed in the illustrations of the book. The making of the engravings will be under the supervision of Frank L. Sewell. The report was adopted. A motion by F. L. Kimmey to appoint a committee of five to go over the 1910 standard was laid on the table.

### STANDARD COMMITTEE TO MEET.

Reese V. Hicks, ex-officio chairman of the committee on the standing revision of the 1915 standard, asked in the report of his committee that a meeting of the committeemen be arranged for some time in the near future, in order that work on the revised standard may begin at once. The report of the committee on the proposed Plymouth Rock breed standard was then taken up again, a motion being made to authorize the committee to issue the breed standard co-temporary with the 1915 main standard of perfection, incorporating all the changes embodied in the latter book. The motion was carried, authorizing the work on the breed standard to begin at once. The original report, asking for an appropriation of \$3,000 for issuing the breed standard, was then adopted.

A supplemental report was made by the Executive Board, recommending that the price of the American Standard of Perfection be raised to \$2 per copy for the cloth editions and \$2.50 for the leather. The wholesale price fixed at \$1.30 and \$1.75 for the cloth and leather editions, respectively. The new prices go into effect at once.

A letter was read from L. B. Audigier of Knoxville, former vice-president of the association, congratulating the association upon its work and welcoming it to Tennes-

see. Mr. Audigier is now in Florence, Italy, and expressed his regrets that he is unable to attend the sessions of the A. P. A. Letter appears in this issue.

A committee of three was appointed to draw resolutions on the death of members during the past year. This committee is composed of U. R. Fishel, G. M. Curtis and E. E. Richards.

### SEPARATE BREED STANDARDS.

In the contest for separate breed standards, the secretary's report showed the popularity of the five leading breeds to rank as follows: First, Plymouth Rocks; second, Wyandottes; third, Leghorns; fourth, Orpingtons, and fifth, Rhode Island Reds. The figures showing the standing of all the breeds were compiled by the secretary's writing to the secretaries of all the larger poultry shows of the country for the number of entries in their show of each breed. The separate standards for Plymouth Rocks, Wyandottes, Leghorns and Orpingtons had already been determined upon, and that of the Rhode Island Reds came upon the number but recently. The standard for Plymouth Rocks, however, is the only one so far upon which the work of preparation has been begun and an appropriation voted by the Association.

At the Hermitage Hotel Wednesday night the banquet of the American Poultry Association was given, with Reese V. Hicks, of Topeka, Kan., President of the association, acting as master of ceremonies. A number of Nashville men and representative members of the association responded to toasts. The dining hall of the Hermitage Hotel had been decorated and an elaborate menu prepared.

The toast list of the banquet follows:

"Our Guests," Mr. Alfred T. Levine, representing the Nashville Board of Trade.

"Fifty Thousand Members," Mr. Grant M. Curtis.

"Old Hickory," Mr. James M. Frank.

"The Ladies," Mr. Chas. D. Cleveland.

"The American Poultry Association," Mr. S. T. Campbell.

"The Tennessee Branch," Mr. C. L. Baker.

"The Sunny South," Hon. O. J. Timothy.

"A Billion Dollar Industry," Mr. Chas. M. Bryant.

"The Press," Mr. H. A. Nourse.

"Tennessee Hen," Hon. O. P. Barry.

The following telegram received from Gov. Woodrow Wilson, of New Jersey, was read before the convention:

"Seagirt, N. J., Aug. 14.—John A. Murkin, Headquarters American Poultry Association, Nashville, Tenn.: May I not extend my congratulations to the American Poultry Association upon its energetic progression of its important work? That work the whole country must appreciate as of capital importance to a great industry.—Woodrow Wilson."

### "RULE SEVENTEEN" VOTED DOWN.

After a hot fight on the floor of the convention the American Poultry Association voted down by a decisive majority, the iniquitous "Rule 17" of the proposed official show rules, which, if passed, would have barred all persons in any way connected with a poultry journal from judging at an exhibition held under the rules of the A. P. A. After the rule had been voted down, one of the members present, who is a judge of wide repute, rose to a point of personal privilege and moved that Frank DeLancy, who had been the chief defendant of the proposed rule, file with the Executive Board all charges of whatever nature he may have regarding judging at certain shows, following alleged insinuations of unfair judging. The motion was carried. All of the other twenty-two show rules were passed as proposed. They contain no new rules of great importance.

Action on the admission to the standard of Single Comb Red Pyle Leghorns and Thoroughbred Games was ruled to be out of order until the year of the next revision of the standard.

The constitution was amended so as to allow the Election Commissioner a salary of \$200 a year and all office and traveling expenses. Another amendment was adopted raising the Secretary's salary \$500, making it now \$2,000 a year. After the speech of President Hicks against the proposed amendment to raise the President's salary this amendment was voted down. The president will, therefore, continue to serve the association without pay, with the exception of traveling expenses to the annual convention. The amendment to abolish the office of Second Vice-President was voted down as it should have been.



The amendment passed which is of great importance to the general poultry industry was as follows:

Amend article IV, officers, by adding the following section: "Sec. 6. The Executive Board may annually elect an organizer for the promotion and development of poultry instruction in public schools, colleges and other educational institutions by means of text-books, clubs, poultry shows and otherwise. He shall work under the direction of the President, Secretary and Chairman of the Lecture Bureau. The time he shall devote and his compensation and expenses shall be fixed by the Executive Board at the time of his election." Several other minor amendments were passed and others voted down.

#### NEW OFFICERS INAUGURATED THURSDAY.

Brief ceremonies attended the inauguration of new officers of the American Poultry Association Thursday morning. These officers were elected by mail ballot, and have been officiating during the present convention. Hearty applause followed the introduction and remarks of each official.

The new officers of the A. P. A. inaugurated Thursday morning are: President, Reese V. Hicks, Topeka, Kan.; First Vice-President, S. J. Hooper, Dallas, Tex.; Second Vice-President, W. C. Cleckley, Augusta, Ga.; Secretary, S. T. Campbell, Mansfield, O.; Treasurer, U. R. Fishel, Hope, Ind.; members of the Executive Board, E. E. Richards, Cedar Rapids, Ia.; Geo. H. Rudy, Mattoon, Ill., and L. C. Byce, Petaluma, Cal.

Report of Jas. E. Rice, chairman of the committee on Education, was ordered printed in the record of the proceedings of the convention without reading.

Invitations were extended to the A. P. A. to send delegates to the convention of the National Poultry, Butter & Egg Shippers' Association the latter part of October.

The convention passed a motion to have the Standard Revision Committee designate two or more places wide apart for meetings of the committee, before which body the breeders of the different sections can appear and make any suggestions desired for the revision of the standard requirements of their breeds. These meetings will probably be held in connection with poultry shows, the dates, however, and places to be fixed later by the chairman of the committee.

A motion to have the President appoint an Appropriation Committee to set aside appropriations for educational work was referred to the Education Committee.

A resolution was unanimously adopted asking that the government at Washington give more attention and service to the poultry industry of the United States.

The publication of a text-book on poultry culture for use in the public schools was the object of a resolution offered by Dr. A. A. Brigham of South Dakota and adopted. A number of enthusiastic speeches were delivered regarding the poultry text-book, urging the need of such a work and the value of it to the poultry industry. The resolution, after a slight amendment, authorized the President, First Vice-President and Secretary of the association to act as a committee in preparing the text-book.

#### THE QUESTION OF A PERMANENT HOME.

The matter of establishing a permanent home for the American Poultry Association was brought up Thursday morning by a resolution that the A. P. A. select at this meeting some central city for the location of its permanent home. The resolution provided that the building contain a poultry library, museum and offices, some of the latter to be rented out to manufacturers of incubators and supplies, in order to make the "home" self sustaining. It was stated before the convention that several cities are ready to donate free sites for such a building, and are ready with various propositions for securing the "home." It seemed to be the opinion of the convention that this matter should be dealt with slowly, and after some argument a motion was made and carried to adjourn in order to hear the address of Hon. O. P. Barry, of Alexandria,

Tenn., President of the Southern Poultry and Egg Shippers' Association.

In his speech Mr. Barry paid a glowing tribute to the poultry business, and was enthusiastically applauded time and again. He offered the hand of his association to the A. P. A. and asked for the co-operation of the two bodies in building up the market side of the poultry industry. After the final adjournment of the convention a number of the delegates and visitors visited Chattanooga and other points.

At the last session of the Association Thursday afternoon, after the matter of locating a permanent home for the A. P. A. was brought before the convention, what appeared to be an effort to rush the matter through in favor of Chicago was made. An offer of a \$100,000 poultry temple, a picture of which was suddenly raised before the convention, almost swept the members into deciding at once in favor of the Windy City, but it was finally decided to lay the proposition of Chicago, with those of all other cities, before the entire membership. We trust some effort will yet be made to place the home in the country.

The Nashville Board of Trade and Industrial Bureau offered grounds and quarters for the permanent home of the association.

A resolution was adopted to erect the "home" and appoint a committee to receive the offers from different cities. These offers will be put before the members by the Election Commissioner at the next election of officers, and the choice of the members will be considered when the matter is taken up for final determination at the 1913 convention.

Invitations were received from Indianapolis, Detroit, Chicago and Atlantic City to hold the 1913 convention of the A. P. A. in those cities. L. C. Byce of Petaluma spoke of San Francisco's getting the 1915 convention, and presented to the convention a lithographed invitation from that city.

A resolution was adopted demanding that President Reese V. Hicks submit his bill of expenses to the Executive Board and collect amount due him. It was said that Mr. Hicks had never drawn up a bill of expenses, taking the money out of his own pocket.

H. C. Pierce delivered a comprehensive lecture on "Market Poultry and Egg Conditions in the South." Mr. Pierce touched upon many improvements needed in the market line of the poultry industry in the South, and illustrated his lecture with charts and figures. He compared present conditions in the poultry industry in the South with conditions a few years back, and in the course of his address emphasized many needed improvements and which, if put into effect, would greatly increase the revenues of the breeders.

#### AN APPRECIATION.

The following resolution was offered by Charles D. Cleveland of Eatontown, N. J., in appreciation of Nashville's hospitality:

Whereas, this association has accepted the invitation of the people of Nashville and of the Tennessee State branch and has enjoyed the unbounded hospitality of the people of the State and has received the most hearty kind of a true Southern welcome.

And, whereas, the association is not unmindful of all the pleasures that have been its share since it entered the doors of this great city, but wishes to express its appreciation of the efforts of the people of this great Southland in its behalf.

Therefore, be it resolved, That the most sincere and grateful thanks of the association be tendered to all those who have made the thirty-seventh annual convention such a remarkable, noteworthy and enjoyable occasion, and especially the citizens of Nashville, John A. Murkin, the city officers and government, the members of the Tennessee State branch, all of whom we hope will remember us with the same feeling of trust and esteem in which we hold them."





# Effect of Present Method of Handling Eggs

By M. E. PENNINGTON and H. C. PIERCE

Food Research Laboratory, Bureau of Chemistry, U. S. Department of Agriculture



**D**URING the calendar year 1909, 4,256,320 cases of eggs were received in the city of New York. Each case contained 30 dozen, hence there were 1,532,275,200 individual eggs, or enough to permit of a per capita consumption per annum of 321. If these per capita receipts in New York, inclusive of losses at the market center, be taken as an approximate indication of the per capita production throughout the United States, exclusive of our island possession, we are producing annually 82,000,000 cases of eggs, with a probable value of \$485,000,000. According to the report of the Secretary of Agriculture for 1907, more "than \$600,000,000 must be regarded as the value of the poultry and eggs produced on the farms in 1907. The amount may easily have been larger. This industry has advanced at such a rapid rate that no arithmetic can keep up with it." Again, in 1908, he says "the eggs and poultry produced on the farms are worth as much as the \* \* \* hay crop or the wheat crop," the latter being estimated at \$620,000,000 for 1908.

In eggs and poultry, then, we have an agricultural product of enormous money value, considered either individually or by comparison with our other agricultural productions. About 89 per cent of our farmers raise chickens; hence, eggs may be said to be a universal food, as well as a food of high nutritive value. The output of eggs is steadily growing, but the demand is growing even faster than the supply due to the increased price of meat, as well as a preference for eggs as food; hence, the price of eggs has gone up. In 1899 the farm price was 11.15 cents per dozen, as an average for the United States; in 1909 the average was 19.7 cents, weighted according to monthly production. These are the prices to the producer, not the consumer. The latter pays from 50 to 100 per cent more than the producer receives. Some of the reasons for this increase will be discussed in this article.

## Centers of Production.

Though the production of eggs is so widespread, only the States of Ohio, Indiana, Illinois, Iowa, Minnesota, Nebraska, Kansas, Missouri, Texas, Tennessee, and Kentucky produce more than are consumed within their own borders, and this production does not cover the entire year, but only those months when climatic conditions are favorable to laying. Fortunately for the devotee of the "fresh egg," it is being produced the year round in one section or another of the United States. The lay in Tennessee and Kentucky is from December until April. In March and April southern Ohio and Missouri stocks appear on the market, helped along by Texas, southern Missouri, and southern Kansas. In the later spring northern Kansas, Iowa, Indiana, Illinois, and the Central States generally have their heavy producing season, and it is when this occurs that eggs are best and most plentiful. Minnesota and Michigan, with a still later season, help out somewhat when the supply of the Central States begins to fail, but the output of both the southern and northern egg belt is far from adequate to supply the demands of the public.

Such climatic conditions as prevail during March and April in the Central States, both east and west, are ideal for egg production and egg marketing. Hence it is only necessary to know the climate of a region in order to know when its egg supply is greatest and best. If one considers the number of months each year when climatic conditions preclude egg production almost entirely over nearly the whole of our great egg-producing territory, it is plain that some provision for these months of scarcity must be made from the season of plenty if eggs are to appear the year round on the tables of any except wealthy people. The development of the resources of Kentucky and Tennessee will help to ease the demand of the eastern markets for "best fresh" eggs during the winter months, but it can never satisfy the general demand any more than the northern belt, as represented by Michigan and Minnesota, can keep all supplied during the heat of midsummer. Therefore, we must continue to study, and work for, and urge, increased egg production wherever the

little feathered lady can manage to eke out a living by dint of hard scratching, be it north, south, east, or west. And we must remember, too, that every new-laid egg is fresh, sweet, nutritious food. It may be small, or dirty, or thin shelled, which faults are at the door of the farmer who disregards breed, feed, and clean and sufficient laying quarters for his hens. The hen has kept pace with her breed and her environment, and almost invariably, even under the worst conditions, she gives her owner more than she receives. What becomes of the fruit of her clucking and endless scratching and unwearied searching for an egg-producing life? She goes singing to her nest and lays a perfect egg; but how many of her lay reach the consumer fresh and sound, and what part does marketing play in the sum total of the quality of the product, the cost to the consumer, and the return to the industry all along the line?

## Grades of Market Eggs.

Let us see what sorts of eggs are found in our markets. Here are rotten eggs, broken eggs, cracked eggs, dirty eggs, and stale, shrunken eggs, and last—unfortunately many times least also—are the fresh, sound, clean eggs, which the market calls "firsts." What causes contribute to this list of undesirable and loss-producing grades? Three causes mainly, (1) climatic conditions, (2) careless or deliberately bad marketing, (3) poor care of the poultry on the farm. Now, in order to understand more clearly the relation between the low market grades and their principal causes, we must first consider briefly what these commercial grades are and how they are determined.

Eggs are graded for market according to size, freedom from dirt and cracks, and freshness. For some markets, such as New York and Boston, the color of the shell is also taken into account, the former market paying several cents a dozen more for white-shelled eggs and the latter putting the same premium on the brown shelled.

## The Process of Candling.

Size, cleanliness, cracks, and color may readily be determined by inspection; freshness, in the sense of a high quality, firm-bodied egg, rather than in the lapse of time since laying, is determined by a process known as "candling." The egg candle consists of a bright light, generally an electric incandescent bulb, protected on all sides by an opaque shield in which are one or two oval holes a little smaller than the egg. The eggs are pressed firmly against these holes and, as the light shines through, the yolk and white may be seen, as well as the air space at the large end of the egg and any foreign bodies that may be present.

An egg which has just been dropped and is still warm entirely fills its shell. But as it cools to the temperature of the air it contracts, leaving a small space at the large end of the egg empty. As the egg ages, whether from long keeping under favorable conditions or short holding under bad conditions, this space increases in size, due to the escape of moisture from the egg through its shell. When the air space becomes pronounced—it may in extreme cases occupy almost half the shell—the egg is known as "shrunken;" it has lost its fine flavor, it is stale, and it sells to the commission man, to the retailer, and to the consumer at a reduced price. The size of the air space is determined by candling.

## Grading by the Candle and by Inspection.

A fresh egg, held before the candle, shows the yolk but faintly as a reddish ball in the center of the shell. It moves if the egg is quickly rotated, but it is disinclined to do so. As the egg ages the position and opacity of the yolk change; it becomes freely movable, perhaps rising, perhaps falling, in the shell and acquiring sharper outlines. "Stale" eggs are classified very largely by these characteristics and are undesirable because of loss of quality and money value.

The rotten egg before the candle is opaque, or dark colored, and is homogeneous. Rottenness may be caused by a developing chick or by the growth of fungi. Rots are a total loss.

A "spot rot" is an egg in which the yolk has stuck to the shell or in which fungi have formed a visible growth,



and is due to long holding. These eggs are lost as food-stuffs, but can be used by tanners.

"Spots" are either particles of fungoid growth, seen as dark masses in the body of the egg when viewed by transmitted light, or the round, characteristic area, varying in size from a small pea to an inch or more, caused by the developing embryo. It is these "spot" eggs which have recently been the cause of so much controversy between the industry and the public officials charged with safeguarding the wholesomeness of the food supplies of the people. When the arena of germination is not sufficiently great to completely rot the egg—even though it has proceeded far enough to form a network of blood vessels and a plainly visible embryo—it has been the habit of certain shippers at the source of production, and also receivers at the market center, to break such eggs into large tin buckets, either with the "blood ring," as the germinal spot is often called, or after that has been mechanically removed, and hard freeze the mass of mixed white and yolk, holding the eggs frozen until needed by the bakers.

Public health officers, backed by growing public opinion, in which the more intelligent shippers and receivers are joining, have been endeavoring to prevent the use of such eggs for food. Their use by tanners is legitimate, but the number of them on the market at certain seasons is enormous, and with the tanners as the only outlet the losses will be very heavy. How it happens that so great a number of "spot" eggs appears for marketing will be shown later.

"Checks" are eggs showing cracks, either those which are "blind," that is, very small, or those which are easily seen yet which do not permit the contents to escape. As opposed to these are "leakers," where the shell is badly broken. Such eggs are sold for food, but at a lower price.

"First quality" eggs are fresh, large, weighing at least 45 pounds to the case of 30 dozen, clean, and with sound shells.

"Second quality" are clean, sound-shelled eggs, which are undersized and which may be fresh; or they may be shrunken and stale from long holding, or from incipient chick development which has not yet reached the "blood ring" stage. The latter form a large proportion of the second quality eggs during the summer season. Full-sized, clean, sound, stale eggs also go as "seconds."

"Dirties," which need no definition, are of varying size and freshness, but are always sold at a lower price.

Effects of Dampness and Heat on Quality.

Having now some idea of the grades of eggs on the markets, let us see what causes contribute to produce them. It has been said that climatic conditions have the greatest influence on the quality of the eggs coming to the markets. Too much rain means that the hens have muddy feet, hence the eggs may be soiled even when deposited in clean nests; but when laid hither and yon, in stolen or unkempt nests, as so many farmers permit their birds to lay, the proportion of dirty eggs is greatly increased. Dampness, too, induces a more rapid growth of the bacteria or fungi which are commonly present even in new-laid eggs, but which are in such small numbers that they can be disregarded unless conditions favorable to their multiplication arise.

Heat, however, is the most prolific source of trouble. Hot weather not only puts the hen out of condition, but it hastens all the evils that an egg is heir to after it is laid. Its flavor is lost sooner; evaporation is hastened, hence the shrunken egg comes more quickly; worst of all, the development of the embryo in the fertilized egg proceeds with a greater and greater steadiness and rapidity as the temperature rises, resulting in the "rots" and "spots" of commerce. It is the medium temperature of March, April, and part of May that is responsible for the high proportion of fresh eggs on the spring markets, as well as the fact that, because the price is apt to fall, the producer ships his eggs quickly. Of this phase, however, more will be said later.

Germination.

In order to preserve the desirable qualities which are found in the new-laid egg until it reaches the consumer the development of the chick must be reduced to a minimum. Germination of the fertile egg begins before it leaves the body of the hen and growth of the chick will continue if the temperature is greater than 68° F., though, of course, the rate of development is slowed if the temperature is below 103° F. At 86° F. to 91° F. seven or

eight days are required to equal three days at the normal heat of incubation. The reverse, however, is true also. If the temperature is somewhat above 103° F., germination proceeds more rapidly. For instance, twenty-four hours at 104° F. to 107° F. gives a chick which is equal in development to one incubated for three days at 103° F.

Losses Due to Initial Delays in Marketing.

These facts are to be remembered when eggs are left in the sun or held in hot freight cars or stacked in hot rooms. The egg must be kept cool at every stage of its handling if it is to retain a maximum of freshness when it reaches the consumer. This is not a simple matter, even when one considers the great progress made in the extension of artificial refrigeration throughout the country. Refrigerated cars and warehouses, chilled rooms at the commission man's, and the retailer's ice box are, with fair rapidity, making possible a system of handling that will surmount temperature difficulties, provided the eggs are delivered to the first refrigerator in good condition. No amount of refrigeration or care will undo the damage done by a few hours of summer sun or a few days in a hot room. Indeed, after deterioration has begun refrigeration is unable to completely check those processes.

The first responsibility for the low quality of market eggs rests upon the farmer, and after him come the country produce dealer or storekeeper and the shipper who does not have artificial refrigeration. Usually the farmer gathers his eggs daily, or he may gather them at irregular intervals. Stolen nests often accumulate a large lay, over a period of some weeks, and may have been covered by brooding hens for a while, to boot, before the farmer happens to find them; but the chances are that every sound-shelled egg goes to market, regardless of the condition inside the shell. If the eggs are gathered with fair regularity, how are they kept while on the farm? Generally where the housewife can most conveniently get them for household use, not where the temperature is low and the air fresh. Neither does the farmer have any regular time for taking this stock of eggs to market. In the spring, when they are most plentiful and the market is falling, he is apt to go weekly or the egg peddler calls at the farm. When hot weather comes and the lay falls off he waits for a larger number or is too busy with "crops" to drive to town. Meanwhile shrinking and incubation are going on rapidly, and, as a last insult to the hen which laid a perfectly fresh egg and the consumer who wants a perfectly fresh egg, he often goes to market with an umbrella over himself, but the basket or box of eggs is exposed to the summer sun, a heat which is often 110° F. and may be 10 degrees or more above that. In the autumn, with a still smaller lay and a rising market, he holds eggs for high winter prices. The conditions under which he keeps them are not conducive to good preservation, and the time is inordinately long. Is it any wonder, with such conditions prevalent on the farm, that studies made in one of the typical western egg-producing States during the candling season showed the following losses on delivery to the packer?

Percentage of eggs constituting a total loss at the packing house.

[Data from 20 shippers, June to November, inclusive.]

Month	No. of Shippers	Per cent of rots or other total loss	No. of dozens examined	Month	No. of Shippers	Per cent of rots or other total loss	No. of dozens examined
June, 2 weeks	12	3.10	5,430	October .....	5	4.47	1,110
July .....	19	2.79	13,740	November ...	2	8.33	210
August .....	16	3.43	9,270	Mean .....		4.36	.....
September ...	9	4.03	2,970	Total .....			32,730

The figures in this table give only those eggs which are a total loss. No mention has been made of the stale eggs, dirty eggs, blood rings, and other sources of partial loss. Note that the greatest number of eggs totally lost is in November, when prices to the farmer are very high. In further confirmation of this fact are some investigations of the quality of eggs brought to the country storekeepers during October, showing that only 25 per cent would rank as "firsts" on the Chicago market, 60 per cent were "sec-



onds," due to long holding, 5 per cent were cracked, and 4 per cent were rotten or stuck to the shell from long holding. Some of the farmers at this time had held eggs for four weeks.

From the Country Merchant to the Packing House.

The country merchant handles eggs as a by-product, taking them in exchange for merchandise. He makes his profits on the merchandise taken in trade, not the eggs, frequently giving an inflated price for them to hold the trade of the desired customer. He, too, is more apt to be careless than careful of them while they are in his possession, storing them in hot or damp quarters and holding for high prices when production is low.

The country merchant and peddler buy eggs "case count," rather than "loss off." Buying "case count" means that a uniform price is paid per dozen, irrespective of the quality of the eggs. Rots bring just as much as good eggs. Buying "loss off" means that the eggs are candled before payment is made and rotten and broken eggs are returned to the farmer. Occasionally a difference is made between first and second quality eggs.

The farmer usually delivers the eggs to the storekeeper or packer's agent by wagon. From these receivers they commonly go to a central shipping plant, which is generally known as a "packing house," and which handles goods in car lots. This plant may or may not be provided with the proper facilities for doing the work assigned it. To get to the packer, however, the eggs generally go by train and in comparatively small quantities, therefore, as "less than car lots," or what is known to railroad men as "l. c. l's." For such small lots and for short hauls the goods are picked up by a local freight train. The wait at the station, which is frequently only an open platform on which the cases remain until the arrival of the train, is ruinous to quality when the weather is warm.

The haul in the "pick up" freight car, the temperature of which is governed entirely by atmospheric conditions, results in rapid deterioration in summer and oftentimes freezing in winter. Generally the time required for the haul from the agent or storekeeper to the central shipping plant or wholesaler is 24 hours or less. However, it may be longer when the territory drawn upon is large, as in southwestern Kansas or Oklahoma, or when connections with small branch lines are not frequent. Under such circumstances the car becomes an excellent incubator, holding well the sun's heat during the cooler hours of night, and it is not unusual in the summer months for the packer to be greeted by the cheerful "cheep-cheep!" of newly hatched chicks as the cases are carried into his receiving room. This does not mean that atmospheric temperatures are the sole source of incubation. Stolen nests frequently furnish eggs with chicks so well developed that only a short time is needed to hatch them. It does mean, however, great loss from rots and spots and a general loss in freshness.

Methods of the Packer.

The progressive packer, who generally handles poultry, eggs, and butter, is now equipped with an artificially refrigerated chillroom which maintains a temperature of 40° F. or a little less. If he is wise he rushes the egg cases into that room, stacks them loosely, and chills thoroughly before shipping to his market center. He also candles in a room which is chilled, removing rotten eggs and broken eggs and grading according to cleanliness, size, and, to a certain extent, freshness. After the packer has graded and repacked the eggs in boxes holding 30 dozen each, with clean "fillers"—as the little strawboard racks which hold the eggs are called—he ships them to the market center, generally in car lots. This gives him a chance to control the temperature of the car, keeping it iced in summer or closing it to prevent freezing if the weather in transit happens to be cold.

Refrigerator Cars.

It is not a difficult matter for the transportation systems to keep egg cars cool enough in summer time to insure quality, provided the eggs are good when they are put aboard the car. But breakage during transit is a serious matter. Freight cars are shunted from siding to siding; air brakes come down hard and the long trains jar from engine to caboose, and flying switches may occur while the cars are moving rapidly. These are hard knocks for an eggshell to withstand. Various devices have been and are constantly being tried by the railroads to prevent the shifting of loads, but the breakage of eggs in transit

is still discouragingly high to the shipper who loses stock, the railroads which pay claims, and the consumer who ultimately foots the bill for both.

The End of the Journey.

At the end of the railroad haul the eggs usually go to the commission man. If he does business on a large scale in accordance with progressive ideas he, too, has a chill-room in which he holds the stock and recandles it. The wholesaler who does not have such facilities works under a disadvantage both to his own pocket and to the consumer's, because if he buys eggs which have been shipped chilled in a refrigerator car they will "sweat" in his shop—that is, become wet by condensing on their shells atmospheric moisture, which condition hastens decomposition; or he will be compelled to buy eggs shipped without refrigeration, which means more rots, more spots, and more stale, shrunken eggs to be disposed of.

At last we have the egg at the market, a journey of 2,000 miles perhaps, but it is not yet to the consumer. It has still to run the gauntlet of the wholesaler and the retailer and perhaps the storage warehouse. The last time its quality was determined was at the packing house. How has it stood the journey, which probably has required two or three days at least, and may have consumed eight or nine days? In other words, what is the quality of the general run of eggs coming into the city market? The data following throw some light on this point.

Percentage of market grades coming to New York from nine States and 85 shippers during a period of one year.

Month	No. of shippers	Percentage.					No. of dozens examined
		Rotten	Cracked	No. 2	Dirty	No. 1	
1909.							
August .....	46	3.96	7.94	11.41	15.52	61.17	61,180
September .....	18	5.29	8.75	14.10	15.44	56.42	18,134
October .....	9	4.30	7.75	17.05	11.48	59.42	13,361
November .....	7	4.41	7.34	16.53	10.46	61.26	18,185
December .....	6	3.05	5.72	16.79	10.23	64.21	8,731
1910.							
January .....	3	3.99	19.40	5.71	15.83	55.07	840
February .....	2	1.80	13.94	1.39	14.46	68.41	3,450
March .....	2	.42	4.02	1.53	3.49	90.54	1,890
April .....	2	3.48	11.15	5.52	13.74	66.11	2,700
May .....	3	1.97	6.44	6.13	14.34	71.12	12,510
June .....	38	3.40	7.30	11.26	13.03	65.01	53,210
July .....	35	5.63	8.02	14.36	12.98	59.01	64,805
Mean for year....	.....	3.48	8.98	10.15	12.58	64.81	.....
Total No. of dozs. for the year....	.....	.....	.....	.....	.....	.....	258,996
Mean, June to Jan., 8 months.	.....	4.25	9.03	13.40	13.12	60.20	.....
Total No. of dozs., June to Jan....	.....	.....	.....	.....	.....	.....	238,446

Here we have 258,996 dozen eggs—more than a quarter of a million dozens—carefully graded according to commercial standards of New York. These eggs came from nine different States. They were from eighty-five different shippers, and the shipments extended over a period of one year, from August, 1909, to July, 1910, inclusive. The figures refer only to the quality of eggs reaching the market. They are not an index of the comparative numbers received during the different months in the year.

Decrease in Supply Due to Bad Handling.

The heaviest receipts in New York are in the early spring; but at that season the great majority of eggs are good, hence relatively few are candled. August receipts are not so heavy; but deterioration is so universal that every case must be examined carefully. This fact is emphasized by a trade journal as follows:

The extreme heat that prevailed in most of the western and southwestern sections during August has had a disastrous effect, and a large part of the stock lately arriving here has been badly heated and "burnt," partially hatched, or actually rotten. \* \* \* Naturally under these conditions high-grade eggs have become more and more scarce and the few obtainable have sold well at firm and hardening prices. \* \* \* Some lots from central and southerly western points have shown dead loss in rots nad hatched eggs ranging all the way up to 15 dozen to the case, and in many lots, even after throwing out the dead loss, have furnished no eggs at all, or very few, fit for use in a good class of trade, owing to their heated condition.



The percentage of rotten eggs, stale eggs, dirty eggs, and other classes shown in the table are conservative figures for New York's egg receipts. They come from shipments which are above the average, yet 3.48 per cent are rotten and 10.15 per cent are stale, taking the figures for the whole year. It is to be remembered, too, that these eggs were all from shippers in egg-producing districts and were received as fresh eggs, not eggs which had been stored.

When the eggs from the peddler or country storekeeper or the farmer himself were received at the packing house they were candled, and an average of 4.36 per cent of all received from June to November, inclusive, were rotten or had yolks adhering to the shell. Adding this loss to the loss at the market center gives a total loss to the consumer (the statement is made advisedly, because the consumer ultimately pays for all the rotten eggs that go to the dump) of 7.8 per cent of the marketed eggs of the United States. What would it mean to New York City alone in increased supply if these eggs could be saved?

Calculating on the basis of New York's egg receipts, which were 4,256,320 cases, it is seen that the rotten eggs coming to New York in 1909 would amount to 4,443,598 dozens, and about the same number was thrown on the dumps of the packers because they were not fit to ship—nearly nine million dozens of eggs that New York might have had for food and did not have because of bad handling.

#### Loss in Quality and Increase in Price.

Consider, too, the loss in quality of the general supply because the conditions which produced 4 per cent of rotten eggs caused staleness in 13 per cent. Here is a large financial loss, due to bad handling. It costs just the same amount to collect, pack, ship, grade, and market a stale, dirty, or otherwise low-quality egg as it costs to perform a like service for a high-grade egg, though the former must sell for a lower price, and the five million dozens of rotten eggs that got to New York represented just as much of an outlay of money as was expended on five million dozens of good eggs. The wholesaler, who weeded out the rotten eggs, spread the loss over the rest of the eggs in the lot, and the price to the retailer went up accordingly. Then the retailer increased his price to the consumer, and the consumer, being the last on the list, paid the price and wondered why the cost of living had increased.

The retailer generally has an ice box in which he keeps eggs while marketing. He is not so apt to offend against the principles of good handling as he is to label goods erroneously. The basket of eggs on his counter labeled "strictly fresh eggs" and "fresh eggs" are more than apt to be practically the same as the basket simply marked "eggs," except for size and cleanliness. The retailer, however, is greatly to blame for wrong ideas concerning "cold-storage" eggs, and this brings us to a general consideration of stored eggs that we may intelligently determine what course the retailer should pursue.

#### The Cold Storage of Eggs.

History does not state when mankind first began to put aside eggs during the season of plenty against the time of scarcity, but we may rest assured that it was many centuries ago. They have been put away in lime and in salt, but neither of these substances is satisfactory under commercial conditions, and in waterglass, but this is very little better than lime or salt. Of all the methods known for keeping eggs a cool, fairly dry, even temperature is best. Such a temperature—that is, from 29° to 32° F.—is obtained in the modern cold-storage warehouse, where, in rooms which are scrupulously clean and fresh, eggs are kept from March or April until the following January, or even February, if the winter is severe and fresh stocks come in slowly.

#### Time of Storage.

It does not pay to put eggs into cold storage unless they are large, clean, fresh, sound shelled, and well packed. It costs just as much to carry poor eggs as good ones, and poor eggs deteriorate much faster in cold storage than good eggs; hence they are fairly sure to be a losing proposition. The great bulk of the eggs which go into storage are from the early spring lay—the earlier, after the danger from frosting is over, the better. By the latter part of May warm weather is apt to interfere with freshness and high quality, and the comparatively few summer

eggs that are stored last must be taken out of storage first if they are to stand well on the market.

Here is a condition of affairs that is directly opposed to the usual point of view of the consumer. If cold-stored eggs are to be used at all, the uninformed buyer demands those in storage for the shortest time, thinking that he will gain quality thereby. Really, the average March or April egg is commonly in better condition in the succeeding December or January than are the eggs stored in June or July. The reason is not far to seek if one remembers the treatment the warm-weather egg gets on its way to market, and the fact that cold is an excellent preservative of freshness in perishable produce provided it goes into the cold chamber in the best of condition.

As stated in the early part of this article, eggs are produced in quantities exceeding the current demands in but a few months of the year, and in comparatively few States, except for home use. During the fall and winter months production practically ceases. At that time even the farmer buys cold-stored eggs for his own consumption. What would the cities do if it were not for the cold-stored eggs? Let us return to the figures compiled for New York and Jersey City and see how the cold-stored eggs are distributed, when they come into the warehouses and when they go out to the consumer.

#### Statistics on Storage and Consumption.

In March, 1909, New York received 516,141 cases of presumably fresh eggs. Of these, 38,000 cases went into storage and 478,141 were consumed. In April 636,423 cases were received and 412,423 were used, leaving 224,000 cases for storage. In May the receipts were almost as large—603,583 cases, and 235,000 went into the cold stores, leaving 368,583 for consumption. Then in July we find only 37,000 cases stored and 327,955 consumed. In August, instead of putting eggs into storage, 20,000 cases were taken out. Why? Because the good April, or even June, eggs kept in the cold store are better than the so-called fresh-market eggs of August. Listen again to a statement from the article on August eggs before quoted: "Dealers have been obliged to use more of the high-grade storage eggs in order to get enough eggs for the best class of trade."

That is why we drew upon our storage stock in August. In September and October decreasing receipts necessitated greater demands upon it, until finally, in January, 1910, New York received only 137,408 cases, many of which were stored eggs shipped in from western storage houses, and drew upon her own stored supply for 145,000 cases more, practically exhausting it. For that month the consumption of eggs in New York was 282,408 cases; more than half that number—probably two-thirds—were eggs put aside in the season of plenty for the season of shortage, and used during that season, for eggs are not carried in cold storage from one season to another, for the very good reason that they will not keep in sufficiently good condition to be marketable. In January, 1910, the wholesale price of fresh eggs (that is, current receipts) in New York ran from 32 to 42 cents a dozen. Prime western storage eggs, meanwhile, were selling at 26 to 28 cents. More than half of all the eggs consumed in New York were cold stored, yet the retailers assured you that their supplies were "fresh—perfectly fresh—except—well, yes, those small stained eggs in that small basket are storage eggs and, of course, they are lower in price."

#### The Retailer, the Consumer, and the Cold-Stored Egg.

Now, what is the truth of this matter? In all likelihood, every egg there was cold stored. The very large, clean, best-order eggs were sorted out and priced as "strictly fresh;" the next most desirable as "fresh," and so on. In order to sell these for what they were not, a mistaken impression of all stored eggs was given by calling the worst eggs in the shop cold stored. Every man who handled those eggs knew they were cold stored and paid a price in accordance with that fact, except the consumer. The consumer, partly because of ignorance concerning the season of egg-production, partly because of prejudice against all cold-stored eggs for all purposes, has allowed the retailer to trade upon his ignorance and prejudice to the great betterment of the retailer's pocket-book. In an age when information is so readily available the consumer is to blame for not knowing more about the subject. Knowing that from November until February egg production has almost ceased, except in the South, and that the market reports 26 to 28 cents a dozen for good storage eggs, does it not follow that the sensible con-



sumer will demand, and get, eggs for about 30 cents a dozen that will fry, scramble, or beat into an omelet in a perfectly satisfactory manner? For soft-boiling or poaching eggs the consumer in the large city must expect to pay from 20 to 40 cents a dozen above the stored-egg price, and even at that figure, because the supply will not go around, he is apt to get eggs that have been held by the farmer until they are really lower in quality than the cold-stored article.

The statement that a cold-stored egg is just as good as a fresh egg is never true. An egg is best when newly laid. Every day causes a loss in eating quality. When environment is bad, one day may render an egg unfit for food; when environment is good, weeks will make so little change that only an expert taster can tell the difference.

#### Some Remedies for Existing Conditions.

What can we do to prevent egg deterioration all along the line, thereby giving the consumer a better product and increasing its value to the industry?

First, the farmer must learn to select good breeds of chickens and take more care of them, that eggs may be larger, cleaner, and more plentiful on the farm. He should also kill off all the mature cocks as soon as the breeding season is over. It is commonly supposed that hens will not lay unless males are present in the flock, but such is not the case. Experiments have shown that flocks without males have produced as many, if not more, eggs than when males were present. When, however, males are present the eggs are fertile, and therefore ready to develop into chicks when temperatures are favorable. Infertile eggs grow stale and shrunken, of course, if held too long, or kept under bad conditions, but they do not form "heated eggs," "blood rings," or the great number of "rots" that come from developing embryos and which account for such a large share of the total losses. The education which the farmer should have in the gathering and care of eggs after they are laid, and the prompt delivery of them to the next person in the marketing chain, is self-evident from the recital of the farmer's present methods.

#### Changes in the Methods of the Small Buyer.

The country storekeepers and small produce buyers are, next to the farmer, responsible for the number of low-grade eggs marketed. They must be taught to buy "loss off" instead of "case count." Buying "case count" places the good farmer and the poor farmer on the same basis, and is grossly unfair to the good farmer. The producer of good eggs receives less and the producer of bad eggs more than they are worth. What incentive is there, on this basis, for the farmer to take extra care and trouble?

The country merchant should be eliminated entirely from egg handling. He likes to buy eggs from the farmer because their value is usually accepted in groceries and merchandise rather than money, and, as has been said previously, he makes a profit on his wares if not from the selling of the eggs. Then, too, if the farmer's wife brings in eggs greater in value than the goods she receives in trade her credit on the merchant's ledger insures her continued trading with him. This makes eggs practically a form of currency. Oftentimes from her eggs and poultry a farmer's wife provides her family with clothes and groceries, and it is not at all unusual in small towns for the doctor and dentist to be paid with a due bill on the merchant to whom her eggs have gone, rather than with money.

Frequently the merchant pays the farmer 2 or 3 cents a dozen more than he receives for the eggs when sold by him, thus inflating the price. The merchant recovers his loss on his merchandise and holds the trade of the farmer, but the man who makes a business of buying eggs suffers and so does the townsman who has no eggs to trade, but must pay the same money price for goods that the farmer pays in eggs.

Again, the merchant will buy "case count" rather than "loss off," fearing to offend his patron. Hence, the produce dealer must do the same, because of the scarcity of eggs, close competition, and the farmer's lack of business knowledge. He can not see that he actually loses money at the merchant's.

To prevent the loss in eggs due to the country merchant a cash business on the quality basis should be instituted. Then the small egg merchant could buy "loss off," pay for the eggs in money, and the farmer could purchase his supplies where they are best and most reasonable. If

competition were placed where it belongs, among the regular egg buyers, the eggs would go to market more rapidly and in better condition.

Another bad habit which is gaining in the countryside is the leaving at the farm by the packer or merchant of carriers holding 30 dozen. The farmer waits until the case is full before marketing. This is not objectionable when the flock is large or production rapid, but out of season or on the small place it means three or four weeks' holding to get a full 30-dozen box.

#### Buying by Quality—Not by Count.

The shipper can materially improve the quality of eggs in the market if he persistently buys by quality—not simply by count. He will also improve his business. This has been tried sporadically, by a shipper or two, here and there, but all except a few firms have forsaken their guns when shots were most needed—that is, when eggs became scarce or low grade and competition began to be felt. One packer has adhered to a quality basis for 12 years, using four grades. He has built up a business which is good and a reputation which is even better. This reputation prevails not only on the market, where his egg pack is taken without a question, but among the farmers and peddlers who supply him with eggs. His grading is accepted by them and their aim is now not only to see how many eggs they can bring in, but how many of them can be gotten to him as "number ones." Here is a real educator as well as a good business man.

#### Refrigerated Receiving Stations.

The packer, too, must have artificially refrigerated rooms for handling and holding eggs. Indeed, it seems likely that, as the egg and poultry industry develops, and we must give more attention to the saving of the garnered foodstuffs, there will be numerous receiving stations throughout the country, easy of access and artificially refrigerated, that perishable products in general may be economically handled at the source of production.

#### Care at the Source of Production.

The source of production. There is the starting point for most of the trouble in the handling of perishable produce, be it southern cotton mishandled in the field before it is baled or western corn that is not well dried before it goes to the elevator, or eggs that are heated or soiled or cracked on the farm. Not all the trouble is at the starting place, of course. Good handling must be everywhere from the producer to the consumer if the maximum of quality and the minimum of loss is to be maintained. But even perfection of handling at the market center can not compensate for bad treatment at the source of supply. The wholesaler is being driven to good equipment and methods because it is economy; the retailer is being forced, little by little, to tell the truth because the strong arm of education and the long arm of the law are both after him. But the farmer, the country merchant, and the small packer are sadly in need of precept and example for the sake of both the producer and the consumer.—Reprinted from 1910 Year Book, U. S. Department of Agriculture.

Theo. Hewes says the American Poultry Association had less than six hundred dollars left at the close of the Nashville convention. This doesn't make a noise like unto an \$100,000 poultry temple. We know of lots of good farms down here in Tennessee that could be bought for fifteen or twenty thousand dollars, and the "home" would not be lost, either. If the action of the Association that the home be erected in one of the larger cities is final, we favor the proposition made by the city of Nashville.

Mr. U. R. Fishel, of Hope, Indiana, will make the American Poultry Association a good treasurer. He is a successful poultryman and business man, one who has made a financial success of his own affairs, and who can be depended upon to use his best efforts in behalf of the association.

The American Poultry Association feels justly proud of the part it had in the passage of the parcels post bill. And it did well to publicly and officially express its lasting gratitude to Senator Jonathan Bourne, Jr., chairman of the Senate committee on post offices and post roads, who so valiantly fought the giant express monopolies and secured the passage of the law.



THE

INDUSTRIOUS HEN

TENNESSEE POULTRY JOURNAL

Devoted to Every Interest of the

Commercial and Fancy Poultryman

Entered at Knoxville, Tenn., Postoffice as second-class matter

S. B. NEWMAN & CO.....Publishers

ADDRESS ALL CORRESPONDENCE TO

The Industrious Hen Co., Knoxville, Tenn.

EDITORIAL AND BUSINESS STAFF

L. B. AUDIGIER.....Managing Editor

E. H. DePOY.....Associate Editor

JAS. B. DISMUKES.....Show Room Editor

MISS B. FAGAN.....Advertising

F. A. GOODLIN.....Traveling Representative

REGULAR CONTRIBUTORS

J. C. CLIPP                  "UNCLE DUDLEY"

MRS. H. P. HINTON          THOS. S. ALLISON

O. F. SAMPSON              J. A. THORNHILL

R. V. MITCHELL             MRS. J. C. SHOFNER

A. A. BRIGHAM              J. A. DINWIDDIE

E. G. WARDIN               W. M. BROWN

Eastern Advertising Representative—J. Lawrence Bradlee, 7

Pine St., New York City.

Northern Advertising Representative—E. H. DePoy, Van-

Buren, Indiana.

Preparing For Inauguration of Parcels Post

**T**HE GRATIFYING announcement was made from Washington, on August 29, by Postmaster General Hitchcock that the post office department would be in readiness on January 1, 1913, to put into general operation the recently authorized parcels post system.

The postal express business, which must be organized within the next three months, will extend over more than a million miles of rural delivery and star routes and will include in its various ramifications all systems of transportation of parcels now utilized by private express companies.

The announcement further states, that in order to take up personally and immediately the work of organization of the new service, Mr. Hitchcock has cancelled engagements he had made for his vacation and will remain in Washington to direct the organization. The details of the parcels post system will be worked out by a series of committees composed of officers and experts.

"First of all," said Mr. Hitchcock "must be prepared a classification of the articles that can be accepted for transportation by parcels post. The law admits to the mails practically all kinds of merchandise that can be transported safely, including products of the farm and garden as well as factory products, provided such articles do not weigh more than eleven pounds nor exceed seventy-two inches in combined length and girth. The mode of packing will be prescribed carefully. The present equipment of the mail service is not adapted to the carriage of such merchandise and, therefore, new equipment must be provided. It is likely we shall employ, extensively, hampers, similar to those used in foreign countries, in handling parcels post mail.

"The law provides that postage on all parcels shall be prepaid by affixing distinctive stamps. This will necessitate the designing and printing of at least a dozen denominations of special stamps, ranging in value from one cent to one dollar. Provision for the collection on delivery of the price of a parcel must be made. Regulations governing this phase of the system already are being prepared.

"The law provides indemnification for lost or damaged articles and since many of the articles to be carried will

be fragile or perishable the question of indemnity is one for careful regulation.

"The question of adequate transportation and terminal facilities for the parcels post mail on railway and steamship lines and in the city wagon service will have to be worked out with such care as to insure the prompt movement of such mail and to prevent a possible congestion of the ordinary mail."

The new parcels post law, the provisions of which have been made public by Senator Jonathan Bourne, Jr., its author, should prove a great boon to poultrymen and farmers. The law provides that any article is mailable if they do not exceed a certain size and weight. The rate is one cent per ounce up to four ounces, regardless of distance. Above four ounces, rates are by the pound or fraction thereof, and varying with distance, as follows:

	First pound	Each Ad. pound	11 Lbs.
50-mile zone .....	.05	.03	.35
150-mile zone .....	.06	.04	.46
300-mile zone .....	.07	.05	.57
600-mile zone .....	.08	.06	.68
1000-mile zone .....	.09	.07	.79
1400-mile zone .....	.10	.99	1.00
1800-mile zone .....	.11	.10	1.11
Over 1800 miles .....	.12	.12	1.32

A dispatch from Washington to the New York American, of Sept. 7, has the following to say concerning the shipment of poultry and eggs: "Urban users of the parcels post system to be started January 1 are likely to get noisy mail when the delivery begins of live chickens, rabbits and other country products by mail. Fresh eggs and country butter will also be handled through the parcels post. This is no dream of cheaper cost of living but will be a reality under the new law, which is designed to put the producer into direct communication with the consumer. General farm and garden produce comes under the law; the government will not only carry these things, but an indemnity will be provided for their loss or damage in transit. A C. O. D. system will be a novel feature. Poultry dealers are especially interested in the parcels post and have flooded the department with statistics showing how eggs and chickens may be handled and carried. One of the particular features of this trade will be the 'day old chicks' around the holiday seasons."

If it is found practicable to ship eggs by parcels post, and we believe it will be, the cost will be reduced almost one-half. The rate from Indianapolis, Indiana, to Cleveland, Ohio, a distance of a little more than 283 miles, will be 7 cents for the first pound, 5 cents for each additional pound, or 57 cents for the maximum weight of 11 pounds. Find the express rate on a sitting of eggs between these points, then get the weight of a sitting of eggs and do a little figuring and the result may interest you. Even if it is found impracticable to carry eggs by parcels post, as some contend, the benefit that will accrue to the general public can not be overestimated.—E. H. D.

Associate Editor to Enter Northern Field

Mr. E. H. DePoy, associate editor of The Industrious Hen, will on October 1, remove to VanBuren, Indiana, where he will engage in the newspaper business. We are pleased to announce, however, that Mr. DePoy will retain his connection with The Industrious Hen, and will continue in charge of the editorial policy of the magazine. Articles intended for publication should, therefore, be addressed to him at VanBuren, Indiana.

With a view to getting in closer touch with our northern advertisers, we have appointed Mr. DePoy as northern advertising representative, and present and prospective advertisers may feel assured that their inquiries will receive prompt and courteous attention through our northern agency. In connection with his newspaper, Mr. DePoy will conduct a modern poultry printing plant, and it is with pleasure that we commend him to those of his territory who may need his services.

INDUSTRIOUS HEN CO.

Southern poultrymen will regret to learn of the accident which befell Mr. C. A. Dobbs, of Gainesville, Ga., on August 29, when he fell from a moving train and had his left hand so badly lacerated that amputation was necessary. The accident occurred at New Holland, Ga. Mr. Dobbs was standing between the coaches when the train gave a sudden jerk, throwing him to the ground.



## A. P. A. Notes and Comments

By E. H. DePOY, Associate Editor

Southern poultry breeders will be gratified to know that Mrs. Florence Forbes, of New Decatur, Ala., was granted a judge's license by the recent convention of the American Poultry Association. Mrs. Forbes is proprietor of the Forbes' Poultry Yards at New Decatur, and is Secretary and Treasurer of the Alabama branch of the American Poultry Association, and the delegate to the convention from that organization. Mrs. Forbes has frequently acted as judge of the poultry exhibits at various state fairs over the country, and other poultry shows, but never as a licensed judge. This is the first time in the history of the organization that a woman has been licensed to judge poultry, and it is a recognition of her ability as a poultry expert.

Mr. L. C. Byce, of Petaluma, Cal., President of the Petaluma Incubator Co., of Petaluma and Indianapolis, Ind., was at the convention. Mr. Byce is a member of the Executive Board of the association and President of the California branch. He says that California is the greatest poultry center for eggs in the world especially for White Leghorns. There are one and a half million White Leghorn laying hens within a radius of ten miles of Petaluma, and last year that city produced ten million dozen eggs, which means from that source alone an income of \$6,000 per day for every day in the year for Petaluma.

Mr. H. A. Nourse, editor of Poultry Herald, St. Paul, Minn., was among the editors from various cities attending the convention. Mr. Nourse thinks Minnesota a great poultry state. In speaking on this subject he said: "Minnesota produces over thirty million dollars' worth of poultry and eggs annually. In spite of our State being such a cold state, as is commonly supposed, it is as great a poultry center as any State in the South, and the fowls thrive as well as in a more temperate climate. Even the White Leghorns, which are thought to be a less hardy chicken than the larger breeds, grow and lay as well as any other variety. I think Minnesota has still greater possibilities as a poultry State."

One of the most enjoyable social affairs given in honor of the visitors and delegates to the A. P. A. was the lawn fete given by Mr. and Mrs. Percy Warner at their beautiful home "Renraw", and the guests of the occasion greatly enjoyed the opportunity not only of meeting the host and hostess, but of going over the extensive grounds and seeing the many fine specimens of birds and fowls which are kept by Mr. Warner. Mr. and Mrs. Warner were assisted in receiving the guests by Senator Luke Lea, Mrs. George Frazer and Misses Margaret and Percie Warner.

The "Bull Moosers" attending the

# This 50¢ metal hopper full of **PURINA** Chicken Chowder Only 30¢



I will give you,  
*through your dealer,*  
this practical, service-  
able, well made *metal*

hopper, chock full of Purina Chicken Chowder, both for 30 cents. I make this remarkable offer solely to get you acquainted with the *egg-producing* powers of **Purina Chicken Chowder**—a dry, egg-laying mash, consisting of approximately the same chemical ingredients found in an egg. It is composed of alfalfa, granulated meat, middlings, bran, corn meal, linseed meal and charcoal.

**"If Chicken Chowder won't make your  
hens lay, they must be roosters"**

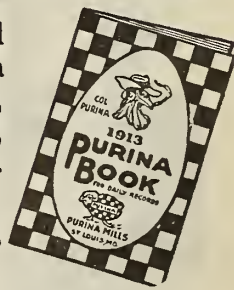
Chicken Chowder assures you an abundance of eggs during the *fall* and *winter*, when prices are *highest*. You cannot afford to be without it. Ask your feed dealer or grocer *today* for a metal hopper full of Purina Chicken Chowder. This offer is made *through dealers only* east of the Rocky Mountains. If your dealer cannot supply you, let me know his name.



## Valuable Poultry Book *Free*

In return for your dealer's name, I will send you my 48 page Purina Book, with ruled forms for egg records and accounts, plans of houses, coops, fixtures, etc., cures of diseases, breeding charts, etc. *Write today.*

Col. Purina, Ralston Purina Mills,  
819 S. Eighth St., St. Louis, Mo.



GREAT BARGAIN SALE OF

## WHITE ROCKS, S.C. BLACK ORPINGTONS

Send now for FREE booklet giving you utility prices on First Prize and Silver Cup Winners. My birds are big layers and winners. Rocks are from Fishel direct, and Orpingtons are from finest English birds. Both old and young stock offered at half-price. Remember this illustrated book is free.

LYNN C. TOWNSEND.

Box 264, Weedsport, N. Y.

## LANSDEN'S FAMOUS REDS

If you haven't got what you expected, remember that I can usually fix you up. I have the best crop I have ever produced. It's too late now to hatch winners. You must have the size—I have it—color and type. Don't buy before you have a talk with me.

H. B. LANSDEN, : : Manchester, Tennessee  
MENTION THE HEN PLEASE.



# More Eggs—Bigger Profits

**Y**OU can have both by feeding Darling's Meat Scraps to your hens. Every ounce of Darling's Meat Scraps is absolutely fresh. Trimmings from roasts and steaks sold over the butchers' counter are picked up by our wagons the same day and cooked that night. In short, Darling's Meat Scraps are made from the fresh trimmings from the edible portion of the carcass. This gives uniform quality and sweetness. Besides—

## Darling's High Protein Meat Scraps

**Contain 55% Protein**

They are low in fat, and fine ground as recommended by both the Experiment Stations and practical poultry raisers.

Darling's Meat Scraps cost no more than goods of lower protein content. Insist upon Darling's 55% Protein Meat Scraps at your dealers.

**Every Poultry Man should send for a free copy of our book on poultry feeding.**

This book is replete with timely, helpful and specific suggestions and hints on the care and feeding of poultry that you should know and profit by. It tells how to increase egg production and egg profits. Whether you own 25, 50 or 500 fowls, you will be tremendously benefited by reading and studying this book. Write for your free copy today. Simply address:

**Darling & Company**  
4208 Ashland Avenue Chicago  
**The Van Iderstine Company**  
23 Railroad Ave. Long Island City, N.Y.



A. P. A. convention at Nashville got together on Saturday and organized. They framed up a constitution and made application to the executive board of the Association for membership. As an evidence of good faith the Moosers put up ten big bucks apiece. They were soon shorn of their antlers, however, as the ex. com. decided to table the whole business for one year. Now progressive Moosers are wondering when these ten spots will return to them. It is said the application was tabled on account of a technicality resulting from a misused term in the wording of the constitution.

A good story is told on Mr. L. C. Byce of Petaluma, Cal., says the Nashville Banner. One delegate approached him soon after his arrival in that city and told him he would like to present him to one of the interesting lady visitors of the association. Mr. Byce, being a great ladies' man, was nothing loth and to his surprise he was carried into the presence of his own wife and formally presented to her. The gentleman, who wished to do the honors of the occasion, had misunderstood Mr. Byce's good lady's name, and never dreamed he was introducing the gentleman from California to the lady who bore his name.

The Mississippi Association reported that they have induced Hon. Bradford Knapp, of Washington, to introduce poultry schools in connection with the corn and tomato schools, which are now doing such good work throughout the South. This branch also reported that the Southern Railway has done and is doing much for the poultry industry in Mississippi, sending out helpful literature along its lines and offering large cash prizes for poultry exhibits.

Dr. Lucius P. Brown, State Pure Food Inspector of Tennessee, was called on by President Hicks for a talk on topics of vital interest to poultrymen. He spoke on the subject of marketing eggs with regard to uniformity of size and color. Dr. Brown advocated selling eggs by weight. He also spoke on the cold storage proposition.

The Tennessee branch, reported a growth of membership the first year from 15 to 94. An effort will be made by the branch at the next Legislature to secure an appropriation for the poultry interests in the State and an appointment of a poultry commission.

Mr. Frank Delancy, editor of The Poultry Fancier, of Sellersville, Pa., who gained much fame (?) as the erstwhile progenitor of "Rule 17," was one of the boosters for Atlantic City.

The Kentucky state branch reported having secured from the last State Legislature an annual appropriation of \$5,000 for the poultry department of the State Agricultural College.

M. R. Jacobus, of Ridgefield, N. J., secretary of the National Campine club, and a prominent poultry judge, was at the convention boosting for Atlantic City.



## GET THE DOLLARS NOW

Push the extra cockerels to market condition and turn them into cash. Bring the pullets to maturity, busy shelling out high-priced eggs. That means profit for you!

### pratts Poultry Regulator

is just what is needed now. It assists digestion and upon this growth and heavy egg production depend. 25c, 50c, \$1; 25-lb. pail, \$3.50  
Get the houses in shape for winter. Spray them with

### pratts Disinfectant

the great destroyer of disease germs and vermin. "Your money back if it fails" Pratts 160-page poultry book, 4c by mail.

Get Pratts Profit-sharing Booklet

Our products are sold by dealers everywhere, or

PRATT FOOD COMPANY, Philadelphia, Chicago

## MOTTLED ANCONAS AND BARRED ROCKS

A few nice early hatched pullets and cockerels for sale. Utility and exhibition birds at reasonable prices.

W. F. BAYLESS

MORRISTOWN, TENN.

## RICHARDSON'S ROSE COMB REDS

MADISON SQUARE GARDEN, BALTIMORE, HAGERSTOWN, won this season five firsts, four seconds, four thirds, one fourth, five fifths. WRITE YOUR WANTS.

M. C. RICHARDSON, JR. : Front Royal, Va.  
MEMBER RED CLUB and AMERICAN POULTRY ASSOCIATION.



## Poultry Disease Department

By J. A. THORNHILL, Hartselle, Ala.

I am a subscriber to the *Industrious Hen*, and I note a question you have answered in April number regarding the feeding of sulphur and salts in the mash for sorehead, but it doesn't say in what proportion to feed same. Please give me some information on this. Also a good remedy for watery diarrhea in baby chicks, probably caused by over-crowding or overheating.—A. P. T., Jacksonville, Fla.

Ans.—Commence in July feeding salts and sulphur in the mash to prevent sorehead, chicken-pox, and other humorous affections. On Monday give to ten hens a tablespoonful of sulphate soda (salts), and on Thursday give one of sulphur. Do not give the sulphur during damp weather. For diarrhea among chicks, give charcoal in a little moistened bread. Often a teaspoonful of sulphate soda (salts) will remove the cause from 15 to 20 chicks.

As I am an amateur, I am writing for a little information. I have a small bunch of White Leghorns, bought them as one-day-old, and they are now about 6 or 7 weeks old. They had the gapes, but before that they had white diarrhea; these we cured with Conkey's remedies. Now they have some disease of the head, no one here seems to know what it is. A white scum comes over their eyes, usually one eye, then eye swells shut and a big knot comes on the head, and the white matter becomes hard and seems to take the eyeball out. It fills up and throat swells up. They seem to eat and are all right for a day or two, but become drowsy and finally die. We have cured some of them but they are one-eyed and the knot does not seem to go down. We feed wheat, bran, oats, bone meal, charcoal, oyster shell, water cress for green food, and once in a while fresh meat.—Scott Brady, Pantono, Ariz.

Ans.—The affection of eyes and head of your chicks is the result of colds and roup. Get some reliable roup cure. Give to your chicks according to directions. In future prevent this trouble among your flock by avoiding draughts. Keep poultry quarters clean; judiciously feed them; avoid sudden changes in connection with their care and keeping; keep them dry; never pamper or mistreat them and occasionally give a dose of sulphate soda (salts) teaspoonful to ten chicks.

We come to you to solve an argument between several friends. What function does grit, oyster shell and charcoal perform in the digestion of the food poultry eat?—A. M. R., Tenn.

Ans.—If you had a copy of "Hen and Chicks," published by the *Industrious Hen*, you would find in an article there just what you wish. Grit enters the gizzard of poultry where

## 8 Weeks Old Birds For Sale

All the expense—all the trouble—all the risk in starting chicks on the road to maturity we take upon our own shoulders. You take no chances whatever—we even guarantee to deliver them safely to any part of the country. For eight weeks they have our expert care. Makes them vigorous, strong and healthy. They're bound to give absolute satisfaction. No other poultry raiser gives you this service. Our supply of these birds is limited—order now.

### Pittsfield Barred Rocks

are in a class by themselves. They result from interbreeding the two greatest strains of Barred Rocks ever produced—the Pittsfield strain and our recently acquired Gowell strain. Money can't buy better Barred Rocks.

#### Our Exhibition Stock

is not living on past reputation. They are winning now. We have some excellent birds for sale that are bound to win at the fall shows. Send for prices and mating list. Also ask for our prices on utility stock, day-old chicks and hatching eggs. Send for our free book, "Money-Making Poultry."

PITTSFIELD POULTRY FARM CO.  
22 Main St., Pittsfield, Me.



Barred Rocks  
PITTSFIELD

FOGG'S

## S. C. W. LEGHORNS

are bred for SHOW QUALITY and HEAVY LAYING. Get our prices on breeding birds and young birds. Our show birds will win for you in any show. Write us your wants now.

N. V. FOGG : Box A, Mt. Sterling, Ky.

## Buff Ply. Rocks, "Giant" Strain Bronze Turkeys and Indian Runner Ducks

Quality backed by years of careful breeding. Our birds are winners in our hands and customers at Louisville, Cincinnati, Chicago, Boston, Indianapolis and Atlanta. If you wish quality, combined with honorable treatment, we can fill your orders and at prices most reasonable. Stock in either variety mated, no kin, and in any number. Write for prices, etc.

J. C. CLIPP : Box 700, Saltillo, Ind.

## OPPORTUNITY IS KNOCKING AT YOUR HEN HOUSE DOOR

We can start you with BUFF ROCKS cheap. Four hens and a cock for \$15.00. We must sell all of our breeders to make room for young stock. Eggs half price. Circular free.

LAKESIDE POULTRY FARM, : Box 4, Route 20, Windsor, Mo.

MAX D. BRINNON & SON, Proprietors.

## BUFF PLYMOUTH ROCKS

Great Breeders and quality young stock for sale. Can please you in exhibition birds for early shows.

JEFFREY & HERVEY : Raleigh, N. C.

## GABHART'S WHITE LEGHORNS

Line Bred. Win at the big shows, Louisville, Lexington, Cincinnati, Atlanta, Knoxville, Kentucky and Tennessee State Fairs. Old and young stock for sale of the best quality only.

W. E. GABHART

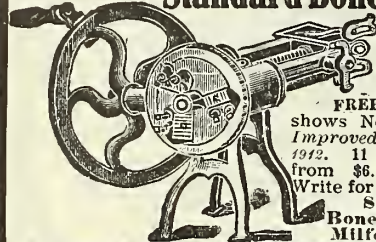
Box M, Bohon, Kentucky



## The Best of All Bone Cutters

Best, because it's the *only* cutter made that cuts bone across the grain. And the most successful poultrymen know that bone cut in this way is easily assimilated by the hens and produces the best results. The

### Standard Bone Cutter



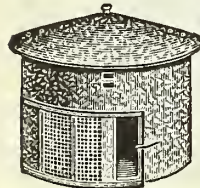
is easy to run and easy to buy. Sent on 10 days FREE trial. Cut shows No. 9, \$3.80. Improved greatly for 1912. 11 other sizes from \$6.75 to \$195. Write for catalogue. Standard Bone Cutter Co. Milford, Mass.



### Ideal Aluminum Leg Band To Mark Chickens

**CHEAPEST AND BEST**  
12 for 15c; 25-20c; 50-35c; 100-60c; 175-\$1.00; 200-\$1.10; 500-\$2.50. Price list and sample 2c. Frank Myers, Mfr., Box 50, Freeport, Ill.

## PERFECTION SANITARY CIRCULAR METAL BROOD COOP



made entirely of galvanized iron which will last a life time. They are properly ventilated, and are Rat, Mink, Weasel and Skunk proof. Just the coop you are looking for. Write for circular & special introductory prices. Perfection Metal Brood Coop Co. I. H. Warsaw, Ill.

# WYANDOTTE JOURNAL

NASHVILLE, TENN.

☞ We publish everything of interest to breeders of Wyandottes.

☞ We want you as a subscriber to this Journal.

☞ We will gladly mail you a sample copy on request.

☞ We want you to see a copy of this paper, it will interest you if you are breeding Wyandottes.

WYANDOTTE JOURNAL  
T. REID PARRISH, Editor  
NASHVILLE, TENN.

it grinds the hard food eaten. It also contains elements which enter the circulation system for the maintenance of bodily requirements. Poultry prefer sharp hard grit. Oyster shell material eaten by poultry also helps in the mastication of hard food, but being a much softer substance than grit will not fill the requirements nor will grit answer the requirements filled by the oyster shells. The lime oyster shells contain, enters into bone, muscle, feather and shell formation. No foods we have analyzed contain enough ash to maintain the hen's body requirement, much less shell formation. To offset the deficiencies found in the food, oyster shells are given. While charcoal is often mentioned in articles on poultry culture, we are led to believe that only about one-fifth of the flocks kept receive it. Poultry, if fed right, will maintain their health without it, but for best results it should be kept before poultry at all times. Fowls continually fed charcoal are seldom bothered with indigestion. It absorbs the noxious gases arising from sour food, and keeps the food sweet during digestion until assimilated, and allays all irritation arising from sour, undigested food. The Government experts claim that charcoal will absorb eighty-five per cent of its actual weight of impurities. Granulated charcoal should be kept before chicks from the first.

Kindly send me an answer to the following five questions on poultry: (1) What do you consider the best green food for winter layers? (2) How much green ground bone do you feed 25 hens and two males? (3) Do you consider green ground bone superior to commercial beefscraps for winter layers? (4) Will whole oats add to the feeding value of a mash for winter layers? (5) which do you consider the best breed for laying purposes?—A. T. M., Tenn.

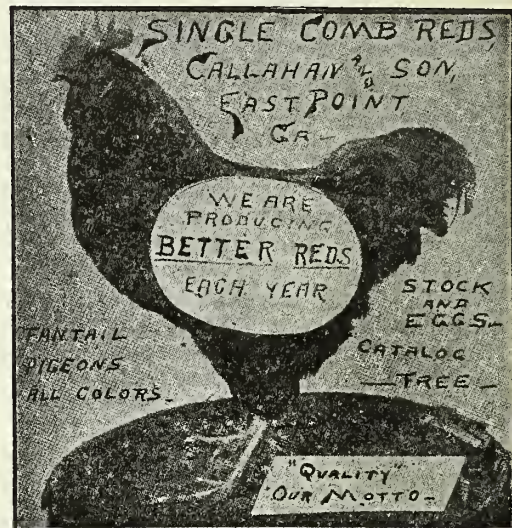
Ans.—(1) Anything that is green, tender and succulent will answer for winter green food. I always sow rye the last of September, or first of October, and obtain good results. Rye not only affords green food for poultry and other stock, but adds to the fertility of land. It is one of the best winter cover crops. (2) All the fowls will eat quickly, about an ounce each. (3) I use both. I prefer the beefscraps, but to form variety, both can be fed to advantage, alternately. (4) I can see no advantage in mixing the oats with mash. White oats soaked over night and fed as a light feed in the morning has proven valuable in winter egg production with me. Oats when properly fed, is the best egg growing grain unless it would be field peas. (5) This is an oft-repeated question. No direct answer can be given, you might succeed with a breed that your neighbor found fault in. Success is possible with any and all breeds, provided the essential requirements are met.

Mr. L. M. H. W., Fla.—Equal parts corn, (cracked) wheat and oats make an ideal formula for laying hens. 25 per cent of total weight in field peas added will add to the value of the grain for egg production. Scatter

## Poultry Profits Doubled

**CAPONS** bring the largest profits—100% more than other poultry. Caponizing is easy and soon learned. Capons sell for 30c. a pound, while ordinary poultry brings only 15c. a pound. Progressive poultrymen know these things and use **PILLING CAPONIZING SETS**

Sent postpaid, \$2.50 per set with "Easy-to-use" instructions. We also make Poultry Marker, 25c. Gape Worm Extractor, 25c. French Killing Knife, 50c. Booklet, "Guide for Caponizing," FREE. G. P. PILLING & SON CO., 23d & Arch Sts., Philadelphia, Pa.



## Crown Bone Cutter



FEED your hens cut green bone and get more eggs. With a Crown Bone Cutter you can cut up all scrap bones easily and quickly, and without any trouble, and have cut bone fresh every day for your poultry. Send at once for free catalogue. WILSON BROS., Box 816, Easton, Pa.

**Best Made. Lowest in Price**

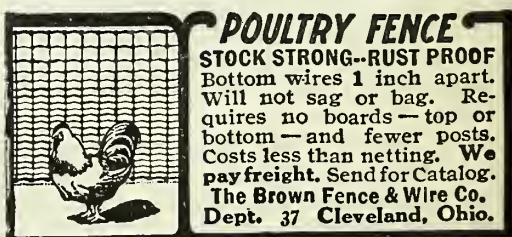
## The SOUTHERN PLANTER

The South's Oldest, Largest and Best Farm Magazine, and THE INDUSTRIOUS HEN, both one year for 50 cents.

INDUSTRIOUS HEN CO., Knoxville, Tenn.

## FARM FENCE

**11½ cts. a rod** for a 26 in. high hog fence; 16 1-2c. a rod for 47 inch high stock fence; 28c a rod for a 50-inch heavy poultry fence. Sold direct to the farmer on 30 Days Free Trial. Special barb wire, 80 rod spool, \$1.40. Catalog free. INTERLOCKING FENCE CO. BOX 36 MORTON, ILLINOIS.



## POULTRY FENCE

**STOCK STRONG—RUST PROOF** Bottom wires 1 inch apart. Will not sag or bag. Requires no boards—top or bottom—and fewer posts. Costs less than netting. We pay freight. Send for Catalog. The Brown Fence & Wire Co. Dept. 37 Cleveland, Ohio.

S. C. White and Brown Leghorns, "Ringlet" Barred Rocks, G. M. B. Turkeys, Rose and Single Comb R. I. Reds. Stock and eggs in season. Write us.

MAPLE HILL POULTRY FARM  
Route 1, Box 23, Morristown, Tenn.



all grain in deep litter. Males among hens when eggs are not wanted for hatching are harmful to their productiveness.

Mr. L. R., Tenn.—Find answer to Mr. A. J. M.

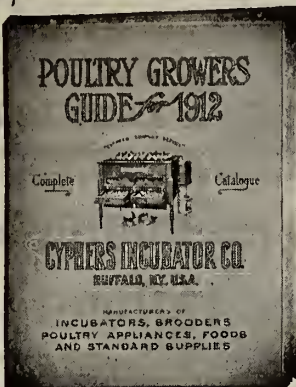
Mr. Thornhill.—Do you know the trouble with my fantail pigeons? They have had eggs three times now, and didn't hatch once, and they are a pair.

Ans.—If you are sure that your pigeons are a pair, the fault must lie with the female not properly sitting. Rats might have bothered her, or there may be an unmated male among your pigeons which cause you trouble. A male that will not mate should be killed.

Am taking the liberty of asking you a few questions: Can good soft roasters be made of three and four pound cockerels and pullets from mongrel stock, by pen or crate fattening, two to four weeks? What price should I obtain from regular customers for this class of fowls, either live, plucked or dressed, beginning sales about September first. Thanking you heartily for the above information and also any advice about feeding them.—H. C. Ferguson, Cornelia, Ga.

Ans.—Several have written for the information you desire. We are glad that some are taking this end of poultry culture for profit. You can make soft roasters out of mongrel stock, but cockerels and pullets of thorough-bred stock will be much more profitable. They produce a more even specimen in shape, color and sizes, and to get the top prices for this class poultry, these requisites must not be lost sight of. At 3 months old, cockerels should weigh about 4 pounds, and with every week's feeding they should add from one fourth to one-half pound. None but healthy, well developed stock should be crate fattened. The feed should be wholesome, fed in reasonable variety. Some advocate mash feed, while others claim best results from all whole grain. We know though, that to get the most fat in the quickest time, one must aid the digestion process, and the best way to do this is to feed partly ground feed. All grains containing fat producing elements and vegetable and animal protein should be supplied crate fed poultry. Never feed more than the digestive organs can properly assimilate, feed at eight in the morning and at five in the evening, all the birds will eat. They, like all market poultry should be sold as soon as "ripe." If pullets are allowed to come to the laying age they do not find as good sale as they would just before this age. Cockerels should be sold as soon as their bodies become plump and the breast well rounded. Yellow corn and beef scraps are the best food for furnishing the fattening on. Crates must be small so that birds can not exercise too much. The essentials for success in the culture of soft roasters are prime, plump, well rounded, soft-meated, yellow skinned, quickly matured, well weighted birds, and for the sale of such product, one should secure hotels, restaurants and clubs who will pay for such poultry.

## EVERYTHING FOR POULTRY-KEEPERS



We manufacture more than one hundred articles for up-to-date, progressive poultry-men and women. Every article warranted to be as represented and guaranteed to give satisfaction or money refunded. Standard goods we manufacture and sell include following:

<b>Incubators</b>	<b>Laying Mash</b>	<b>Pigeon Supplies</b>
<b>Brooders</b>	<b>Short-Cut Alfalfa</b>	<b>Lice Powder</b>
<b>Brood Coops</b>	<b>Meal Alfalfa</b>	<b>Roost Supports</b>
<b>Chick Shelters</b>	<b>Full-Nest Egg Food</b>	<b>Roosting Paper</b>
<b>Brooder Stoves</b>	<b>Nodi Charcoal</b>	<b>Spray Pumps</b>
<b>Leg Bands</b>	<b>Poultry Remedies</b>	<b>Powder Guns</b>
<b>Caponizing Sets</b>	<b>Napcreol (Disinfectant)</b>	<b>Wire Fencing</b>
<b>Chick Food</b>	<b>Anti-Fly Pest</b>	<b>Bone Cutters</b>
<b>Developing Food</b>	<b>Egg Preservative</b>	<b>Chick Markers</b>
<b>Growing Mash</b>	<b>Fumigating Candles</b>	<b>Bone Mills</b>
<b>Fattening Mash</b>	<b>Drinking Fountains</b>	<b>Root Cutters</b>
<b>Scratching Food</b>	<b>Grit and Shell Boxes</b>	<b>Nest Eggs</b>
<b>Fertile Egg Mash</b>	<b>Food &amp; Water Holders</b>	<b>Poultry Books</b>

Our Complete Catalog for 1912 consists of 244 pages, 7½x10 inches, and contains an illustrated description of all goods we manufacture. Eight valuable chapters on "Cyphers Company Way" of increasing egg-yield, producing prime table poultry, etc. Latest labor-saving devices and money-making ideas. FREE, postpaid, to any address if you mention that you saw our advertisement in this paper. Address Home Offices, or Branch Store nearest you.

**CYPHERS INCUBATOR CO., Dept. 13, BUFFALO, N. Y.**

Branch Stores and Warehouses: NEW YORK, N.Y. BOSTON, MASS. CHICAGO, ILL. KANSAS CITY, MO. OAKLAND, CAL.  
23 Barclay St. 12-14 Canal St. 329-31 Plymouth Court 317-319 S.W. Boulevard 2127 Broadway

The prices, of course, would depend very much on local conditions. From ten to twelve cents per pound should be easily received above average market prices.

### MORE EGGS.

By the time this is in print we will want to be gathering a greater amount of eggs than we are now, for the time has come for prices to advance. First thing to consider is to see if our hens are free from vermin. I dip my hens in May and again in August to be sure they are safe to go through the winter without lice. But this is no good if you don't mean business and clean the hen house and all the nests, burning the stuff the nests were made of and coaling boxes, roosts and cleaning everything, sure that no mites are left.

Now we are ready for the feeding. Where there is a large family and a garden, there is always bread and vegetables left over. I mix everything together in the morning, even including scraps of meat, for I don't consider anything wasted that I give my hens. This time of year I only feed night and morning, there is plenty for them to get during the day and at night I give them a generous feed of corn and am sure they have plenty of clean fresh water to go to roost feeling comfortable.

I never fail to get eggs all the year. I just kept 20 hens this year and had all the eggs we could use and my neighbor who has 80 hens depended on me for eggs to bake her cakes in emergency cases. The trouble is she has so many she cannot give them the care that they need.

I don't like to break a hen from sitting if she becomes broody even in summer. Sometimes I let a hen set on 5 or 7 eggs even to satisfy her desires for she will do a lot more good, take her small brood and raise every one of them without any trouble and commence laying in the early fall and will lay till far in the winter without missing a day.

I always give my hens or chicks all the milk I can spare, whether butter milk, whey or sweet milk; all are good.—Mrs. W. P. Hunter, Lyle, Tenn.

## Ideal Poultry Tablets

ECONOMICAL



CONVENIENT

Something Entirely New  
To be Given in the Drinking Water

Guaranteed the best cure and preventative for  
**ROUP, CHOLERA, DIARRHEA**  
**GAPES, SORE HEAD**  
**CHICKEN POX, ETC.**

This Remedy is not only the best one known for Roup and all other membranous affections of fowls, but is also one of the very best for Cholera and other Bowel Troubles, such as White Diarrhea among chicks, to which those hatched in incubators are especially susceptible. Also Gapes, Chicken Pox, Sore Head, Frost Bite, Canker, Catarrh, Diphtheria and Pip.

The simplicity, convenience and sureness of this plan will appeal to all poultry raisers. The ingredients, Permanganate of Potash, Epsom Salts and Boric Acid, are known by poultry breeders to be the finest Medicines ever used for the diseases for which we recommend the tablet.

This tablet was suggested by one of the most experienced poultry breeders in the country, and gotten up on his, and other experienced breeders' advice.

Bottles containing 50 fifteen grain tablets, 25c;  
300 tablets, \$1.00, Charges Prepaid

If your dealer will not supply you, send us your order

MANUFACTURED AND GUARANTEED BY

**BLACKMAN STOCK REMEDY CO.**  
CHATTANOOGA, TENNESSEE

**Barred PLYMOUTH ROCKS**

—AND—

**White Ind. Runner Ducks**

High-class Exhibition and Utility Stock. Our young birds are simply grand. Give us a trial.

**WOLF CREEK POULTRY YARDS**

Box 242 ABINGDON, VA.



# BIG SALE BEST ANCONAS IN THE SOUTH

All of our ANCONAS advertised in last issue are not gone yet. We have some good ones left. Better inquire about them at once. Everything goes, including all our prize winners at the big Southern shows. Write

DISMUKES & ARRINGTON

Castalian Springs, Tenn

## WHITING'S PARTRIDGE PLYMOUTH ROCKS

**D**O YOU want fowls for egg-producing purposes? You might, of course, go in for some egg-machine. But these birds are too small to be money makers. Then try Partridge Plymouth Rocks. They are a big bird, handsome and desirable. At egg production they are second to none. In a year's egg-laying contest six hens produced 1,320 eggs. They won the first prize. My stock is straight from the fountain-head, Noftzger. Eggs \$5.00 a setting. Address care Georgian, Atlanta, Georgia.

—PERCY H. WHITING.

## CARTER'S BROWN LEGHORNS

### STOCK

For Sale October 1st  
CIRCULARS FREE

E. E. CARTER

Dept. I. H., Knoxville, Tenn.

**MORE EGGS ARE LOST** from over-heating than from any other reason. We guarantee it impossible to over-heat the Tulane Incubator. Three trial hatches. Catalog free. TULANE INCUBATOR CO., Box 88, Lebanon, Ky.

## LaFollet's WEEKLY MAGAZINE

and The Industrious Hen, both one year, and a copy of "Hen and Chicks" for \$1.25. Send orders to The Industrious Hen, Knoxville, Tenn.

## Poultry Shows & Associations

By JAS. B. DISMUKES.

**D**ECEMBER 16 to 21 is the date which was fixed at a meeting held recently for the next show of the Southern International Poultry Association, Atlanta, Ga., which is expected to eclipse in size and importance last year's exhibit, which was the biggest ever known to the South, more than 3,000 fowls being displayed. The members of the association decided that an invitation will be extended the Georgia Poultry Association, which also contemplates a show to unite with the Southern International in an exhibit that can vie with Madison Square Garden and the other famous shows of the East. A committee composed of Dr. S. H. Peck, John S. McCreight and T. P. Hunnicutt was appointed to confer with representatives of the Georgia which also contemplates a show, to unite the two big shows into one stupendous production. J. G. Postell, better known as "Uncle Dudley," president of the association, presided at the opening meeting. Among the other officials of the association present were Loring Brown, of Smyrna, chairman of the executive committee, and T. M. Poole, secretary. A score of the most prominent breeders in that section of the country attended the meeting, and all were enthusiastic over the prospects of a brilliant 1912 show.

Thomasville (Ga.) fanciers have organized a poultry association and will hold a show next season. At a recent meeting the following officers were elected: Mayor Chase C. Hill, president; F. E. Sigmon, secretary and treasurer; T. S. Crutchfield, vice president. Messrs. Charles R. Thomas, T. S. Crutchfield and Festus E. Sigmon were elected directors. The association starts off with about twenty-five members, with a committee to solicit members, and from the enthusiasm shown at the first meeting they will no doubt add many members to the list before next meeting. At next meeting constitution and by-laws will be adopted, and other arrangements made for a big show.

The National Single Comb Rhode Island Red Club will offer some special prizes at every show whose Secretary publishes in its premium list the notice of these prizes. For further information, address A. G. Studier, secretary, Waverly, Iowa.

The Newton County Poultry Association will hold their show at Cov-

### SHOW DATES.

Missouri State Fair, Sedalia, Sept. 28-Oct. 4.  
Winston-Salem, N. C., Oct. 1-4, 1912  
Lynchburg, Va., Oct. 1-4, 1912.  
Fayetteville, Ark., Oct. 1-4, 1912.  
Sweetwater, Tenn., Oct. 1-4, 1912.  
Searcy, Ark., Oct. 1-4, 1912.  
Paris, Ark., Oct. 1-4, 1912.  
Hope, Ark., Oct. 1-5, 1912.  
Emmerson, Ark., Oct. 2-5 1912.  
Rhea Springs, Tenn., Oct. 2-7, 1912.  
Stephenville, Texas, Oct. 3-5, 1912.  
Alabama State Fair, Birmingham, Oct. 3-12.  
Jonesboro, Ark., Oct. 7-11, 1912.  
Richmond, Va., October 7-12, 1912.  
Tupelo, Miss., Oct. 8-10, 1912.  
Greensboro, N. C., Oct. 8-11, 1912.  
Asheville, N. C., October 8-11, 1912.  
Carlisle, Ark., Oct. 8-11, 1912.  
Conway, Ark., Oct. 8-11, 1912.  
Corinth, Miss., Oct. 8-12, 1912.  
Dresden, Tenn., Oct. 9-12, 1912.  
Piggott, Ark., Oct. 9-12, 1912.  
Brownsville, Tenn., Oct. 9-12, 1912.  
Texas State Fair, Dallas, Oct. 12-27, 1912.  
Meridian, Miss., Oct. 14-19, 1912.  
Ft. Smith, Ark., Oct. 14-19, 1912.  
North Carolina State Fair, Raleigh, Oct. 14-19.  
Petersburg, Va., Oct. 15-18, 1912.  
Danville, Va., Oct. 15-18, 1912.  
Selma, Tenn., Oct. 15-18, 1912.  
Cleveland, Tenn., Oct. 15-18, 1912.  
Camden, Ark., Oct. 15-19, 1912.  
Georgia State Fair, Macon, Oct. 15-25.  
Ala. State Exposition, Montgomery, Oct. 16-25.  
Benton, Ark., Oct. 17-19, 1912.  
Mississippi State Fair, Jackson, Oct. 21-26.  
Charlotte, N. C., Oct. 22-25, 1911  
Emporia, Va., Oct. 22-25, 1912.  
Farmville, Va., Oct. 22-25, 1912.  
Atlanta, Ga., Oct. 27-Nov. 2, 1912.  
Columbia, S. C., Oct. 28-Nov. 2, 1912.  
Spartanburg, S. C., Oct. 29-Nov. 1, 1912.  
La. State Fair, Shreveport, Oct. 30-Nov. 6.  
Augusta, Ga., November 4-9, 1912.  
Charlottesville, Va., Nov. 6-8, 1912.  
Camden, S. C., Nov. 7-9, 1912.  
Arkansas State Fair, Hot Springs, Nov. 11-16.  
Little Rock, Ark., Nov. 25-30, 1912.  
Morganton, N. C., Nov. 26-29, 1912.  
Lake Charles, La., Nov. 26-29, 1912.  
Covington, Ga., Nov. 28-30, 1912.  
Falls Church, Va., Dec. 3-5, 1912.  
Taylor, Texas, Dec. 3-5, 1912.  
Lincolnton, N. C., Dec. 3-6, 1912  
Hydro, Okla., Dec. 4-7, 1912.  
Bennettsville, S. C., Dec. 9-14, 1912.  
Victoria, Texas, Dec. 11-14, 1912.  
Corsicana, Texas, Dec. 11-14, 1912.  
Chattanooga, Tenn., Dec. 16-21, 1912.  
Atlanta, Ga., Dec. 16-21, 1912.  
Shelby, N. C., Dec. 19-21, 1912.  
New Orleans, La., Dec. 19-22, 1912.  
Louisville, Ky., Dec. 23-28, 1912.  
Charlotte, N. C., Jan. 3-7, 1913.  
Norfolk, Va., Jan. 7-10, 1913.  
Plainview, Texas, Jan. 7-10, 1913.  
Spartanburg, S. C., Jan. 7-10, 1913.  
Charleston, W. Va., Jan. 7-11, 1913.  
Roanoke, Va., Jan. 7-11, 1913.  
San Antonio, Texas, Jan. 7-12, 1913.  
Washington, D. C., Jan. 14-17, 1913.  
Statesville, N. C., Jan. 14-17, 1913.  
Columbia, S. C., Jan. 28-31, 1913.  
Columbia, S. C., Jan. 28-31, 1913.  
Fort Worth, Texas, March 18-23, 1913.

ington, Ga., Nov. 28-30, 1912. They offer a large number of cups, and a large amount of cash. Attractive catalog will be out Sept. 15th. They expect not less than 1,000 entries. Show will be judged by comparison, and they will have one of the best judges in the United States. Write E. L. Peck, Secretary.

The Southwest Virginia Poultry Association, Abingdon, Va., will have its next show, Dec. 10-13, 1912, and have engaged Mr. Eugene Sites, of Elyria, Ohio, as judge, with the comparison system in vogue. They are



**Smith Sealed.**  
Prices postpaid  
—12,30c; 25,50c;  
60, \$1.00; 100,  
\$1.50; 500,  
\$6.50; 1000, \$12.50.

**LEG BANDS**

**Leader Adjustable.** Prices postpaid—12,15c; 25,25c; 50,40c; 100,65c; 250,\$1.50; 500,\$2.75; 1000,\$5.25.

**FREE**  
Write postal or order now. Satisfaction guaranteed. Address THE KEYES-DAVIS CO., Inc., Dept. 520 Battle Creek, Michigan



looking forward to a bigger show than ever before. M. H. Smith, secretary, Abingdon, Va. —

The Louisiana Poultry Fancier's Association wishes to call the attention of our readers to the fact that quite a number of poultry papers have made a mistake in their dates and also in the name of the Secretary of the show to be held in New Orleans, December 19th to 22nd. R. E. Bruce, 330 Carondelet St., is the secretary and treasurer, W. Theo Wittman, of Allentown, Pa., and W. C. Pierce, of Indianapolis, Ind., are the judges. There is no question but what they have selected two as competent judges as there are in America and as their entry will probably be limited to about 1,500, it behooves the breeders who care to exhibit with them to send in their application for premium list as early as possible. We anticipate having our premium lists ready for mailing between November 1st and 10th. Entries will close about December 5th.

The Augusta Poultry Association announces with pleasure the dates for their 13th Annual Exposition, to be held in connection with the Georgia-Carolina Fair Association, on Nov. 4-9, 1912. Premium list will be more attractive than ever and will be ready for mailing September 1st. Don't miss this show. For further information, address, W. C. Cleckley, President; Jno. J. Cohen, Jr., Secretary, Augusta, Ga.

The Chattanooga (Tenn.) Poultry Association offers many handsome silver cups, gold and merchandise specials at their big show, to be pulled off at Chattanooga, Dec. 16-21, 1912. F. J. Marshall, judge, Write W. F. Maury, Fairmount, Tenn., for further information.

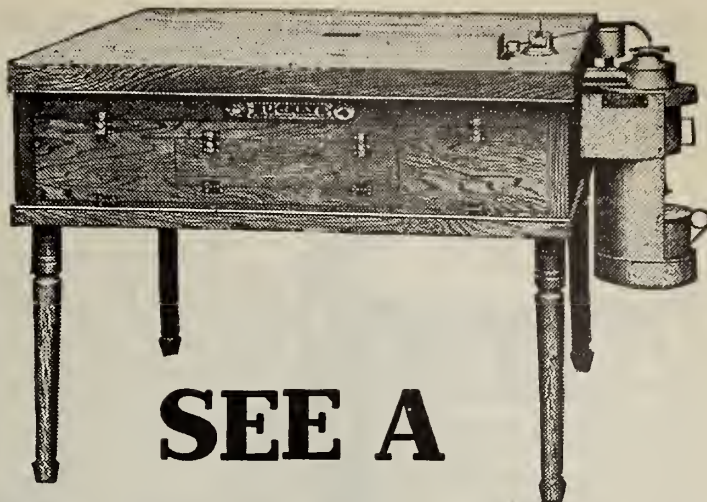
The poultry show to be held in connection with the Rhea Springs (Tenn.) fair, is to be a big thing for East Tennessee breeders. Write to A. J. Lawson, Cleveland, Tenn., for information.

Poultry shows of which dates are not announced, will be held at Laurinburg, Hendersonville, Marion, Henrietta and Lenoir, N. C., and at Chesterfield, S. C.

The Savannah (Ga.) Poultry Association will give its Second Annual Poultry Show, November 25th to 29th, inclusive. For information, write A. B. Moore, President.

#### ROUP IN SUMMER.

If the birds have the roup and are not entirely cured during this warm weather they never will be entirely, and when fall arrives the disease will break out again. The only remedy we can suggest is to kill every one of them, disinfect the premises and procure new stock from healthy flocks.



## SEE A BUCKEYE Before You Buy an Incubator.

### Let our agent show you a 1913 Buckeye!

Let him show you a Buckeye in operation, so you can see for yourself that it will hatch more chicks and better chicks than any other incubator. Let him show you the Buckeye Hot Water Heating System (the kind all the big breeders use in their mammoth machines), the automatic supply of natural moisture, the fireproof heating apparatus, the copper tank and boiler, the heavy 3-wall case, the dark hatching chamber and a dozen other features that make it possible for the Buckeye to produce such wonderful hatches.

The Buckeye is not built to exploit some fad or fancy—it is built to hatch eggs—and it does it. We *guarantee* the Buckeye to hatch every hatchable egg, and our agent can prove to you that they will do this—before you spend your money.

The 1913 Buckeye is the result of 22 years of incubator building. It is equipped with every desirable device that can possibly add to incubator efficiency—it represents incubator perfection in both hatching and construction.

**Sold as low as \$8.00**

**Made in 5 sizes—60 eggs to 350 eggs  
Over 325,000 in successful operation.**

Buckeye incubators are sold by over a thousand merchants—in every state in the Union. We have agents everywhere who will gladly show you a Buckeye in operation. Send us your name on a postal and we'll send you the name of our agent in your town, so you can see the chicks hatching and examine the incubator in every detail. Ask our agent to show you the 5-year guarantee that goes with every Standard Buckeye. Send us your name today!

*Our 1913 Catalog sent on request.*

**THE BUCKEYE INCUBATOR CO.,**

525 W. Euclid Ave.

Springfield, Ohio.

## GOLDEN and COLUMBIAN WYANDOTTES

Prize Winners at all the leading shows. Prices reasonable. Send for mating list "Golden Opportunity."

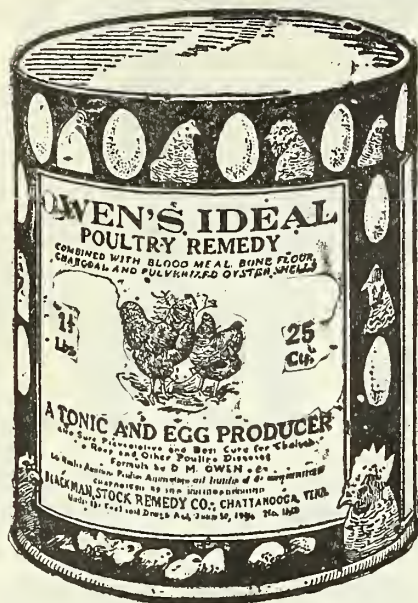
**OLD HOMESTEAD FARMS**

J. H. McDANELL, Prop.,

Box 126, Warsaw, Ky.



## A QUARTER CENTURY OF EXPERT POULTRY EXPERIENCE



Desiring to manufacture and sell a Poultry Remedy with real merit, we secured from Mr. D. M. Owen, of Athens, Tenn., (who is one of the best poultry judges and breeders in the United States, and who has devoted over thirty years to this work,) the formula he is using and has found to be the most satisfactory of the many he has tested as a cure and preventative for Cholera Roup, and other poultry diseases, and for keeping poultry in perfect health and condition, which insures the greatest possible growth and egg production.

Practically all poultry breeders know Mr. Owen as one of the peers in the poultry world, and that there is no higher authority on this subject, and that poultry owners are very fortunate in securing this remedy at the same price of the goods ordinarily sold, which experienced poultry breeders and Pure Food Commissioners know to be almost, if not entirely worthless.

Our remedy is composed entirely of Rosin, Copperas, Sulphur and Cayenne Pepper, and is packed in 1½-lb. 25c cans; 10-lb packages, \$1.50; 25-lb. amount of Blood Meal, Bone Flour, of which are highly recommended by

buckets, \$3.50, mixed with double the Charcoal and Ground Oyster Shells, all of which are highly recommended by Judge Owen, and other poultry breeders.

We are the only Poultry Remedy Manufacturers naming all ingredients and the proportion of each. We put nothing in ours we are ashamed of.

If your dealer can't supply you, write us, giving his address. Our other goods quoted by dealers, or us, on request. Ask for folders and free pocketbook.

### The Opinion of "One Who Knows"

After giving your Poultry Powders and Insect Powders a thorough trial, I am convinced you are making the best preparations on the market—something that will do the poultrymen as much good as anything they have ever had the pleasure of using. I know the ingredients of your powders, and that there is nothing better for the health and welfare of the poultry in this country. I also use your Medicated Salt Brick, Pure Salt Brick and Holders for my stock, and am highly pleased with them.

I wish you much success, and congratulate you on manufacturing here in the South, something so valuable to us.

LORING BROWN.

Smyrna, Ga., Oct. 30, 1911.

### What Another Poultryman Says

I take pleasure in saying that Owen's Ideal Poultry Remedy is of especial merit.

I have had very little results from the use of other Poultry Remedies and had about arrived at the conclusion that they were all worthless, when I was induced to try yours.

I had thirty hens giving only three or four eggs per day. After using your remedy, my returns from the same hens were remarkable, running up to eighteen eggs per day within eight days.

I am satisfied you have a formula that is scientifically constructed and will bring fine results.

DR. K. J. SCHUMANN.

Athens, Tenn., May 21, 1912.

**BLACKMAN STOCK REMEDY CO.**  
CHATTANOOGA, TENNESSEE

## Specialty Clubs & Associations

### AMERICAN BUTTERCUP CLUB.

The general interest shown throughout the union in Buttercups is almost phenomenal, as shown by the fact that since the organization of the American Buttercup Club, I have received over 1,200 letters of inquiry concerning them, and neither myself or any other prominent breeder has been able to fill the orders for stock and eggs which have poured in upon us.

The American Buttercup Club now numbers 64 paid up members, and as a club we are a member of the American Poultry Association. A committee consisting of the oldest and best posted Buttercup Breeders in this country are now preparing a Standard which will no doubt be adopted by the A. P. A., and Buttercups will be given a place in the next edition of the American Standard of Perfection.

I regret to be obliged to recall the announcement of a meeting of our members, and competitive exhibition, at the N. Y. State Fair in September, for the reason that the managers will not break their rule to give place to none but standard varieties, so we will probably have no meeting previous to our regular annual meeting in January of which notice will be given later.

In the mean time but little can be done but for each of us to get as well fixed as possible to help meet the terrific demand which is sure to come next spring for stock and eggs.

A Club catalogue will no doubt be issued in January, giving list of members, standard, typical illustrations of birds and combs, and other matter of vital interest to all breeders of Buttercups.

Mr. Isaac F. Tillinghast, Factoryville, Pa., Secretary-Treasurer of this Club, will be pleased to furnish application blanks for membership to any one desiring same.

### AMERICAN LEGHORN CLUB.

The above club will hold its 18th annual meeting in Charlotte, N. C., during the Great Southeastern exhibition, Thursday, January 13th, at 2:30 p. m. in the show room.

The election of officers and new members for 1913 and other business of importance will be transacted.

The club now has near 500 well known Leghorn breeders as its members and is the oldest of Specialty Clubs.

Its 1912 Year Book is well worth a place on any breeder's desk. It is free to all Leghorn breeders who may be interested. This club is the club to belong to if you want your name ever before the buying public in every State in the U. S., Canada and Italy.

Membership fee \$1.00 with dues paid to July 1st, 1913. Join today and go after the \$200.00 in cash and cups to be offered at the above meeting.

Mr. S. H. Hackney Sec'y., of the

## SUMMER BARGAINS

A few S. C. WHITE LEGHORN, WHITE WYANDOTTE and BUCKEYE hens and cocks for sale cheap. Also Pedigreed Collie Puppies. Write your wants. I can please you.

**MRS. H. P. HINTON**

R. F. D. No. 6, Box 87-A,

Dallas, Texas



**THE BEST IN THE SOUTH**  
**MY WHITE PLYMOUTH ROCKS**  
**WRITE FOR ILLUSTRATED PRICE LIST**  
**W. J. BRINKLEY, Iuka, Miss.**



## EGGS---\$2 Per Sitting of 13

S. C. White and Brown Leghorns, White Wyandottes, Barred Plymouth Rocks, Houdans, Black Minorcas, Light Brahmas, Cornish Indian Games and S. C. Rhode Island Reds. Large Pekin and Indian Runner Duck eggs, \$2.00 per 11. Send for folder. It's free. Exhibited ten birds at the great Southern International Poultry Show, Atlanta, Ga., and won three firsts, three seconds and three thirds, 4,500 birds competing. Also won at Baltimore, Md.

**NEVIN POULTRY YARDS, Wardin Bros., R. 7, Charlotte, N. C.**



S. E. P. A. of Charlotte, N. C. will furnish application blanks to those who wish them, or write direct to Club Secretary, Norman L. Kisling, Bel Air, Md.

### RED BREEDERS CLUB OF THE WORLD.

This club was formerly launched in May, and at present has over 3,000 members. Rhode Island Reds are said to be growing very popular in foreign countries, hence the club was organized as an international affair. A silver cup will be given in every State in the Union to be competed for by members of the club. Following are the officers:

President, F. L. Ober, Verona, Penn.; First Vice-President, F. E. Harrison, Menominee, Mich.; Second Vice-President, E. P. Allen, Quincy, Ill.; Secretary-Treasurer, W. C. Pierce, Indianapolis, Ind.

#### Executive Board.

Three members for three years—Loring Brown, Atlanta, Ga.; J. H. Cutchins, Roanoke, Va.; E. A. Wilson, Cainsville, Mo.

Three members for two years.—Dr. Anson P. Hall, Oakland, Cal.; Robert Dunsire, Brandon, Man., Can.; J. A. Ferry, New Rochelle, N. Y.

Three members for one year.—J. D. Erwin, Spartansburg, S. C.; H. A. Berg, Woodward, Okla.; Thomas H. Spratt, Helena, Mont.

#### Finance Committee.

Frederick Besuden, Cincinnati, O.; O. L. McCord, Danville, Ill.; W. C. Hopewell, Madisonville, Ky.

### SPECIALS OFFERED BY THE AMERICAN WHITE ORPINGTON CLUB.

The American White Orpington Club offers as specials at the shows this season a set of handsome white silk Club ribbons with gold fringes, as follows:

One for best Single Comb White Orpington Cock.

One for best Single Comb White Orpington Cockerel.

One for best Single Comb White Orpington Hen.

One for best Single Comb White Orpington Pullet.

Also handsome Club medals for best Single Comb White Orpington Pen.

Also handsome Club Cups at State Shows.

The specials are open to members only who are in good standing and have paid dues to and including 1912 or 1913. All breeders should join this Club and compete for these handsome specials. The initiation fee is only \$1.00, which includes first year's dues. Yearly dues, \$1.00 or life membership, \$10.00. Full information and fine new club book full of good articles on White Orpingtons can be had by writing the Secretary, F. S. Bullington, Box 328, Richmond, Va.

#### "RED HEN TALES."

The Red Hen Tales for 1912 now out containing valuable hints on breeding Reds, and a complete history of

## OWEN FARMS

OUR WIN AT NEW YORK,  
MADISON SQUARE GARDEN,  
LAST SHOW

**BUFF ORPINGTONS:** Five Firsts, including 1st Cock, 1st Hen, 1st Cockerel, 1st Pullet, 1st Pen, making first in all the classes, and also 3d Cock, 4th Hen and 6th Cockerel.

**WHITE ORPINGTONS:** Three Firsts, 1st Cockerel, 1st Hen and 1st Pen; also 2d Pen, 3d and 5th Cock, 6th Hen and 3d Pullet.

**BLACK ORPINGTONS:** One First, 1st on Cockerel, and also 5th Hen and 5th Pen.

**WHITE ROCKS:** Four Firsts, 1st Cock, 1st Cockerel, 1st Pullet and 1st Pen. 2d in all five classes, Cock, Hen, Cockerel, Pullet and Pen. 4th and 5th Cock, 4th Hen, 5th Cockerel, 4th Pullet, and on Pen we won every place but 4th, making our Pen winnings, 1st, 2d, 3d, 5th and 6th.

**BARRED ROCKS:** In this variety no exhibitor won more than one first. We won 1st Pullet, which was awarded the Shape Special and also won the Championship for best female. We also won 4th Pullet and 2d Hen.

This made a grand total of 27 Firsts, 12 Seconds,

total number of birds winning under ribbons at We submit to you frankly this question: Could any other farm than Owen Farms possibly be in a position to do more for you than they can? We answer it for you by saying it is not possible. With 8000 young birds, and 2000 older birds for the cock and hen classes, possessing all the quality that their New York winners have made possible, they can and will do more for you than any other farm possibly could.

Whether you are rich or poor, a large breeder or a small breeder just beginning, makes no difference to us. Our price on a particular bird is the same to all. We necessarily have birds that will fit your needs, however

WM. BARRY OWEN, Prop.  
MAURICE F. DELANO, Mgr.

OWEN FARMS

William Street  
Vineyard Haven, Massachusetts

**WHITE WYANDOTTES:** Three Firsts, Cock, Cockerel and Pen. Also 3d and 4th Cock, 2d, 3d and 5th Hen, 2d Cockerel, 2d and 3d Pullet, and 2d and 3d Pen, giving us the first three awards on Pen.

**SINGLE COMB REDS:** Three Firsts, 1st Cockerel, 1st Hen, 1st Pen. Our 1st Hen also won the Shape Special. We also won 5th and 6th Cock.

**ROSE COMB REDS:** Two Firsts, 1st Cock and 1st Pen. Our 1st Cock was the Champion Male of the show. We also won 3d Cock, 2d and 6th Hen.

**SILVER PENCILED ROCKS:** Four Firsts, Cockerel, Hen, Pullet and Pen. Also 3d Cock, 5th Hen, 4th Cockerel, and 3d and 5th Pullet.

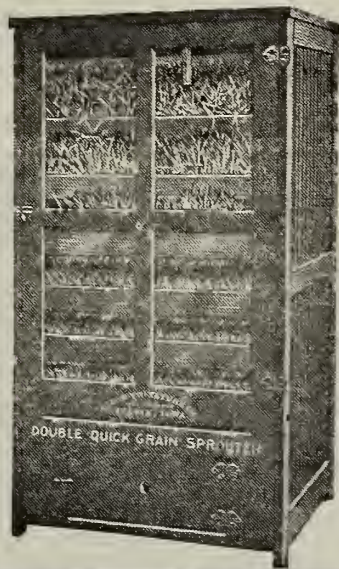
**COLUMBIAN WYANDOTTES:** 1st and 4th Pullet and 4th Pen.

11 Thirds, 9 Fourths, 10 Fifts and 5 Sixths, and a

this famous and largest show in America of 139. large your show and particular your requirement, or however modest may be your intention to commence breeding or exhibiting. There is no one interested in poultry who is desiring to purchase whom we cannot and will not give our very best attention to and try to carry out to its utmost the golden rule, namely, that we will do exactly by you as we would be done by.

Our catalogue containing 131 pages of illustration and interesting matter will be gladly sent you upon request. We only ask you to write early for exhibition birds. It takes time to select, wash, fit and coop-train, and correspondence consumes more or less time inevitably.

## Sprouted Oats--Winter Eggs



Get ready for the Highest Prices in Eggs this winter the market has ever seen. For Prolific Egg Production, feed Sprouted Oats. For Great Quantities of Sprouted Oats, get a

### Double Quick Grain Sprouter THE PERPETUAL POULTRY SILO

A Veritable Hot-house, Growth-forcing machine. Sprouts in 24 hours and makes growths of two inches or more daily. A PERFECT ROOT VENTILATION that forces enormous growths in very quick time. Makes TWO to FOUR BUSHELS of feed from one of grain. Pays a Profit Every Month in the Twelve. The DOUBLE QUICK is Double Walled, Insulated Wooden walls outside and Moisture-tight metal chamber inside; Heat-retaining, Automatic-moisture producing, Perfectly Ventilated, and scientifically constructed to sprout and grow great quantities of sweet, crisp sprouts with nothing but clean grain, water and the lamp heat. Made in six sizes, from a few hens to 1,000.

### CLOSE-TO-NATURE CO.

28 FRONT ST. : : COLFAX, IOWA



## Mammoth Bronze TURKEYS For Sale

Old and young stock from two magnificent flocks, mated for largest size and best plumage. When buying be sure you buy the best. My breeding toms for six years have weighed from 43 to 50 lbs. at 18 and 20 months of age. Won many prizes in the leading shows, scoring from 96 to 97½ points. I can furnish you young stock that will grow that way for you. Do not delay buying your breeding stock early. Also Barred Plymouth Rock Chickens from the best prize-winning blood. Eggs in season. Member A. P. A. MRS. J. C. SHOFNER, Booneville Poultry Yards, Route 1, Mulberry, Tenn.

## Densmore's S. C. W. Leghorns

WIN, LAY AND PAY

To make room for growing stock, we will offer a few choice breeding pens at half price. Also 500 one and two year old hens at \$1.00 and \$1.50 each.

THE DENSMORE POULTRY FARM, Inc., Roanoke, Va.

## Breeders and Exhibition Stock for Sale

Including some of our prize winners at Norwalk, Milan and Cleveland  
Breeders of "RAINBOW" PARTRIDGE ROCKS

ROCKWOOD FARM

: :

Box T, Norwalk, Ohio



# BUFF PLYMOUTH ROCKS

## TAR HEEL STRAIN

Won more first prizes in 1911-12 in some of the South's leading shows than all competitors together. Young stock better than ever before. If in need of cockerels, pullets or pens for breeding or showing, I can fill your needs.

**J. G. ASHE, Owner and Breeder,** : : : **Raleigh, North Carolina**

### SAYLOR'S CONDITION TABLETS



Just the thing to condition Chickens and Pigeons for the show room and keep them in condition to win the **BLUE RIBBON** and **SPECIALS** is the aim of every exhibitor. We say to **YOU** a trial box of **SAYLOR'S CONDITION TABLETS** will convince you of their great merits. **Follow Directions and You Will Thank Us. Results Guaranteed.** Dealers wanted.

Price by mail, 25c. per box

Write to A. R. Saylor Drug Co., Allentown, Pa. U. S. A.

## EADY'S S. C. R. I. REDS

Winners at many leading shows—Birmingham, Mobile and Gadsden, Ala.; Houston, Texas; Meridian, Miss., and Tullahoma, Tenn. At the Alabama State Fair, 1910, we won three cups—two Club cups, one the Rhode Island Red Club of America for the best winnings; one the National Single Comb Rhode Island Red Club cup for the best pen of Reds. Won the other cup for the best cock, cockerel, hen and pullet. We won first pen at the Alabama State Fair, at Birmingham, three years in succession. We have won six cups in the last three years. Pens mated January first. We are now selling eggs at half price, per setting of 15. Send your order today. Some good stock for sale, write for prices.

**C. W. EADY, Guntersville, Alabama**

## SINGLE COMB BUFF LECHORNS

Campbell's Buffs the best in the South. Blue Ribbon winners wherever shown.

At the Great Appalachian Exposition, won Grand Prize Silver Medal and Diploma for Best Cockerel in the Mediterranean Class, also eleven ribbons on Seven entries; specials for shape and color. At Asheville, 1910, won Grand Prize Gold Medal and Diploma for Best Cockerel in the Show. Two grand prize Silver Medals and Diplomas won this winter on one cockerel for best cockerel in shows. One pen of nice S. C. BUFF ORPINGTONS and prize-winning INDIAN RUNNER DUCKS. Write for my Mating List before placing your orders elsewhere.

**MRS. C. B. CAMPBELL, - - Asheville, N. C.**

THE LEADING BUFF LEGHORN SPECIALIST OF THE SOUTH.

Secretary-Treasurer North Carolina Branch A. P. A.; Third Vice-President of American Leghorn Club; State Vice-President of the American Buff Leghorn Club.

## BLYTHE BROTHERS BARRED ROCKS

Box B, FRANKFORT, KY.

Now is your chance to secure extra good breeders at a very low price, as we must have the room for our growing youngsters. Exhibition birds of quality—just what you want for your fall shows. Book orders at once, and mention the Hen.



S. C. WHITE LEGHORNS, INDIAN RUNNER DUCKS, RUFUS RED, BELGIAN HARES.

Stock and Eggs for sale at all times. Send 3c in stamps for booklet and catalogue, tells how to make these breeds pay.

Kling & Hawkins, Poultry Yards and Rabitry. Box "E"

Meridian, Miss.



## Lee's POULTRY FARM

FORT MILL, SOUTH CAROLINA

Offers for quick sale, several hundred of our best young hens, utility grade, with few prize-winners at \$1.00 each. They are beauties and have only layed one season. Also three months old pullets at 75 cents each. We do business on the square. Bank references here.

## ORPINGTON GROVE

The birds of the GROVE have won many FIRSTS, SECONDS, etc. Also SPECIALS, SILVER CUPS, etc., under the most famous judges in the Poultry World. They have been handled and PLACED by Judges DREVENSTEDT, WITTMAN, DENNY, COOK, MARSHALL and BROWN. EGGS—\$1.00 each, \$10.00 and \$5.00 setting 15. Write for mating list.

**MRS. L. L. UPSON**

:

**Box 607, Athens, Georgia**

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE INDUSTRIOUS HEN.

Club to date free to every Red Breeder who joins the Rhode Island Red Club of America. Fee for joining, \$1.00.

Red Hen Tales 25 cents per copy to non-members. Stamps not received. W. H. Card, Manchester, Conn., Secretary and Treasurer.

### NEW CORNISH CATALOGUE AND CLUB MEET.

The 1912 catalogue of the American Cornish Club is the finest ever gotten out by any specialty club. It is a 70-page book full of fine illustrations and useful information; one article on mating and breeding is indispensable to any Cornish fancier. Price, 25 cents silver, free to members. The annual meeting will be held in Chicago, December, 1912; this will be a great meeting and we want all possible to attend and bring your birds.—W. A. Low, President, Catonsville, Md.; H. C. Hayes, Sec., Eureka, Ill.

### COLUMBIAN WYANDOTTES

National Columbian Wyandotte Club will hold its Annual Meeting and Club Show in connection with the Philadelphia, Pa., Poultry, Pigeon and Pet Stock Association, December 10-14, 1912. The Club is engaged in raising a Special Fund of \$500 to be used exclusively for prizes at various shows the coming winter. At the Philadelphia Show there will be offered \$200 in cash besides many silver cups, medals and other prizes for Columbian Wyandottes alone. Silver Cups, Cash Specials and Club Ribbons are to be offered at various State and local shows in the United States and in Canada. The membership of the club is fast increasing and great interest is being shown in the coming show season. For Club Catalogue, (which is free) and Membership Card, \$1 pays for membership to November 1st, 1913. Address, National Columbian Wyandotte Club, Ralph Woodward, secretary and treasurer, Grafton, Mass.

Diarrhea, so common in young chicks, is caused perhaps from foul food, impure water, poisoned ground, or it may be inherited from diseased stock. Sometimes it is the result of simple indigestion caused by careless feeding. Discover the cause and remove it. For young chicks scalded milk, thickened to the consistency of cream with flour, and seasoned with nutmeg and ginger or a little black pepper, is a most efficacious remedy. A few drops of creolin in the drinking water is also effective; be careful that it is only enough to cloud the water and not sufficient to make it milky.

If possible spade up some part of the runways so the layers can get a dust bath, and after they have made a mulch of the dust by fluffing in it, scatter some lice powder on the top, which will help some.



# White—THE LEON ORPINGTONS—Black and PARTRIDGE PLYMOUTH ROCKS

I am anxious to send more stock South. I have 3,000 head of fine breeding and exhibition stock that I can give just the quality desired and at prices that are right and fair. I breed all my own stock and know just what is back of them, and give a guarantee that they will make good guaranteed winners for any show. Write me. My stock has won over 400 prizes at the leading middle west shows in the past 4 years and are very heavy winter layers.

C. W. REEDER, : : Box D. H., Leon, Iowa

## Our Breeders and Their Birds

The members of the Aldrich Poultry Farm, Columbus, Ohio, seeing five years ago that the S. C. White Orpingtons possessed qualities likely to make them a very popular variety, determined to engage in breeding them and secured very good foundation stock, from two strains, then probably the most prominent. Having proved that their judgment was correct and having bred a fair number and among them some of the whitest cocks and cockerels yet produced they determined to make a specialty of this variety and to make the Aldrich Poultry Farm one of the leading farms breeding that variety.

Not content with the good stock

ported from England, selected to combine the weight and color of the best English stock with none of the minor defects not objected to in England but disqualifying them here, were mated by Mr. May the best White Orpington expert of the United States and Canada, to produce the highest type of the variety, and their progeny reared and fed by the English methods, we believe form a flock with fewer culls, and of size, color, type and from blood unexcelled by any other strain in the world.

Write them for prices for exhibition or for utility stock, or if desiring to purchase a number of birds, visit them and see if what they say is not strictly true.

Mr. Hugh S. Thomas, the Buff Orpington breeder of Georgetown, Ky., has been unusually fortunate at the shows this summer, having won 71 rib-



General View of Aldrich Poultry Farm, Columbus, Ohio.

they already had, they secured the services of Mr. Geo. J. May as manager, and with his assistance began the purchase of the highest class of birds that money could buy, purchasing from the leading breeders of the United States, Canada and England and only taking stock which in the judgment of the firm and manager was worthy of a place among the best and continued regardless of expenses until they had secured something over 250 birds, which they claim cannot be equaled as a whole in any one farm of the world.

Not until they had proved the quality of the stock by having taken 51 regular prizes and 37 special prizes in a single season at St. Louis, Chicago, New York, Baltimore, Pittsburgh, Cleveland and Madison Square Garden, in competition with the leading breeders of the world, did they offer an egg or chick for sale.

These birds which included birds im-

bons. He won 21 firsts out of a possible 26. This certainly speaks well for his stock.

WILL  
MAKE  
HENS  
LAY.

WILL  
MAKE  
CHICKS  
GROW.

ODORLESS

**SOMETHING TO CROW ABOUT**

**"HEN-E-TA"**

About 30% Tri-Calcium Phosphate  
Popularly Called **BONE ASH**

NO OTHER  
BONE NEEDED

NO OTHER  
GRIT NEEDED

NO MORE BONE CUTTERS NEEDED  
NO MORE BEEF-SCRAPS NEEDED  
NO MORE CHARCOAL NEEDED  
NO MORE OYSTER-SHELLS NEEDED

100 lbs. - \$2.25  
500 lbs. - 9.00

**Balanced Ration Formulas Free**

If you will give us your dealers  
name and address.

**HEN-E-TA BONE CO.**

NEWARK, N.J. DEPT. 8 FLEMINGTON, W.VA.

## WHAT 20c WILL DO

If you are interested in poultry raising, you want to know the best way to feed and care for them. You also want to know all about the best breed in the world.

### RHODE ISLAND REDS



Our beautiful catalogue, (printed in three colors) of 64 pages and cover contains many articles on raising and caring for poultry in large and small flocks, also how to feed for eggs and their fertility. The best system to lay out a poultry plant. How to build a good fresh-air Poultry House with plans, etc. Any one

of these articles are worth dollars to poultry raisers. It will also tell you why Rhode Island Reds are the best breed in the world. This catalogue will be sent post-paid for 20 cents in stamps or cash. Remember we are successors to

C. L. Buschmann's Non-Fading Rose Comb  
W. C. Pierce's Best Quality Single Comb  
**RHODE ISLAND REDS**

Address all mail to

### Buschmann-Pierce Red Farms

W. C. Pierce, Gen. Mgr., Box 60, CARMEL, IND.  
We are the most extensive breeders of Rhode Island Reds in the world.

### SHOW BIRDS

#### R. C. or S. C. Rhode Island Reds

Ready for the early shows. That's how we are fixed. If you want to win the prizes in your show and are in need of stock to do it with, we can fit you out. **OUR SHOW RECORD STANDS UNEQUALED.** Have you seen the Origin and History of Rhode Island Reds? If not, send two dimes or 20 cents in stamps and one will be sent to you. Address all mail to

### Buschmann-Pierce Red Farms

Box 60, CARMEL, IND.

We are the largest breeders of Rhode Island Reds in the world.

## GINSENG

Large profits made from cultivating ginseng, the most valuable crop in the world. Easily grown in the United States and Canada. Send 4 cents for postage and get booklet No. 11, telling all about it. McDowell Ginseng Garden, Joplin, Mo.

### SHOW COCKERELS

From my Sweepstakes Cockerel, S. C. Brown Leghorns, Atlanta, Dec., 1911. Also 1 cock, 4 cockerels, S. C. Red; 2 cocks, several cockerels, Partridge Rocks. Write for Prices  
L. P. MATTHEWS, Thorntown, Ind.



# BALLARD'S INDIAN RUNNER DUCKS

At the Great Appalachian Exposition, 1911, in the largest class of Indian Runners ever shown in the United States, we won all firsts. Certified pen average 225 eggs each per duck in one year. We are the oldest Indian Runner breeders in the South. Choice breeders from the three varieties for sale after June 15th, at one-half price. Write for catalogue. CLAYTON I. BALLARD White Pine, Tennessee.

## LEGHORNS

Show hens of highest quality, fit to win in fast company, \$10.00 to \$15.00 each.

Some pullets nearing maturity, they show "Brown Beauty" quality, and will make great winners; \$10.00 to \$15.00 each.

Pullet line cocks or cockerels, mated as I mate them, with two females, guaranteed to produce some high-class exhibition pullets; \$25.00 trio.

Cocks or cockerels for exhibition purposes; \$10.00 to \$25.00 each.

It has been my good fortune during recent years to have produced some of the best specimens ever shown.

**J. H. HENDERSON**  
KNOXVILLE, TENN.

Breeder Brown Leghorns Since 1890  
Member of the A. P. A. and The American S. C. Brown Leghorn Club.

## 1,000 CHOICE FOWLS Given Away As Premiums to Our Agents

Only a few hours' work is required securing subscriptions to our poultry magazine, which is easy work as we have one of the best 25c poultry journals published. Here is an opportunity you can not afford to miss. Every one interested in poultry will subscribe.

### SEND POSTAL FOR OUR PROPOSITION

We start you in the poultry business at no cost to you. We have a most liberal proposition. You can earn as many fowls as you wish, all carefully selected from choice pure bred stock, almost any variety. We also give dozens of other valuable and useful premiums, including cash commissions if desired. Sample copy and full particulars free.

POU TRY POST, Dept. 21, GOSHEN, INDIANA

## WHITE RUNNER DUCKS

Leading all other poultry for profit and popularity. Foundation stock direct from originator. It will be to your interest to write us for prices on stock and eggs before placing your order.

JEFFERSON POULTRY FARM, Albany, Ga.

## WANTED TO BUY

100 or more March hatched well grown and developed Snow WHITE Indian Runner Ducks—pure white egg strain. Write

**J. R. KELLY, Cordele, Georgia**  
and give full description and prices.

A SQUARE DEAL

## Water Fowl and Turkeys

### DUCKS.

In the east, where ducks are raised mostly for meat, the Pekin ducks are largely used; but in this section of the country, on the average farm, and with little care and attention, there is no duck living that will produce more food for the same amount of food consumed and the same care and attention given than the Muscovie. On the average farm and around homes where surplus food around the lot can be had, no duck will pay as well as a small flock of Muscovies. They are great scavengers, and live off the waste around an average place. Usually they lay and set themselves, and if the young ones are given a little care for the first week or 10 days of their lives, the mother duck will usually raise every one of them afterwards. Often they will raise three broods a year. I have seen two Muscovie ducks during the past week, one with a flock of 27 little ones, and the other with a flock of 25. Each brood was 10 days old. Every duck that was hatched was living, and they certainly did look thrifty and promising.

Usually, a young Muscovie drake, at 12 weeks old, will weigh six to eight pounds, and will make a meal for a large family. I do not know of any fowl that will make more growth quicker, and better meat, than the improved Muscovie duck of today. They are usually hearty and healthy, and it is surprising how many pounds of flesh one-half dozen good Muscovie hens will produce for a family in one season. They never have any disease, are hearty, and should be bred more largely for meat purposes than any other variety of ducks. With the Muscovie for meat and the Indian Runners for eggs, it gives any one a combination hard to beat, and they can be kept on most any premises. The Muscovie ducks do not make any fuss or noise like the Indian Runner or Pekin, and for city use are not objectionable in this respect.

It is surprising why some one has

not started a large duck ranch in the south similar to the ones in the east. One reason for this, I suppose, is that the southern people have not been educated to eat more ducks, or there is not so great a demand for them as there is on the eastern markets. However, a lot of food that is consumed by eastern duck breeders is produced in the south. Rice bran is one of the principal foods used by several of the large duck breeders of the east. This bran is shipped to New York from South Carolina, Louisiana and Arkansas, and has been found to be one of the cheapest and best foods that can possibly be used in the feeding of ducks in large numbers. The nearest large duck ranch in this section of the country is located at River-town, Va. Usually from 10,000 to 20,000 ducklings are marketed from this ranch each season. This plant has been in operation for many years, and has proven a profitable investment. Of course, considerable capital and much labor is required to successfully conduct a large duck ranch, but most of the large duck farms of the United States have been in successful operation for many years, some of them more than 20 years, and they have continued to grow larger and larger each season. One of these plants is now using a 72,000-egg capacity incubator, and during last season marketed nearly every day 1,000 or more ducklings at 8 to 10 weeks old.

Some day, as the demand increases for it, we will probably have in the south a large duck farm, which should be as profitably conducted as some of those in the east. At the present rate of interest that has been shown in ducks during the past year, there will most likely be, in the next few years, some one who will undertake this industry on a large scale. But to any one who is thinking of doing so, they should by all means pay a visit to several of the large plants in the east and see how the business is handled before they invest too much capital in it, and it should be tried only in a limited way in this section, at first at least. I see no reason why, in time to come, an industry of this kind could not be made very profitable in the south.—Loring Brown, in Atlanta Journal.



## Rhodes' White INDIAN RUNNER DUCKS

ORIGINATOR OF THE RHODES STRAIN

Great layers of large white eggs. Can spare a few choice breeders. Eggs, \$5.00 per 12.

MRS. A. N. RHODES : New Castle, Indiana

## SNOWFLAKE WHITE INDIAN RUNNER DUCKS

Prize winners Always. Heavy layers of pure white eggs. Breeding and young stock for sale. } MRS. E. E. ESHBACH  
1402 Sturm Ave. : INDIANAPOLIS, INDIANA



# HATTEMER'S WHITE ORPINGTONS

Are known for their good qualities. They are layers, breeders and show birds. We have 200 young stock from winners in the South's largest shows, for sale at live and let live prices. If it's WHITE ORPINGTONS you want, we can please you in both quality and price.

**J. F. HATTEMER**

: : :

**Fort Deposit, Alabama**

## STANDING OF 3 PENS IN TEST OF FEEDING METHOD.

Allentown, Pa., July 29th, 1912.—Our pen of five S. C. White Leghorns in the North American International Egg Laying Contest at the State College, Storrs, Conn., where they do not receive any of our poultry remedies have laid from November 1st, 1911 to July 24th, 1912, 600 eggs.

While our pen of five S. C. White Leghorns at Oakland Poultry Farm, Trenton Jct., N. J., which are fed exclusively The Saylor Way of feeding with the aid of the Saylor Poultry Remedies as per our Real Egg Getter Recipe have laid in the same time from November 1st, 1911 to July 24th, 1912, 856 eggs.

Pen, in the Egg Laying Contest of the Evening Post, Louisville, Ky., conducted on U. S. Senator Thomas H. Paynter's famous stock farm, have laid from April 1st to July 23rd, 1912, 277 eggs. This pen of 5 Single Comb White Leghorns stands very high in the Leghorn class.

The pen at Oakland Poultry Farm fed the Saylor Way with the aid of our Famous Poultry Remedies should convince the most skeptical that Saylor's Poultry Powder has great merit as an egg producer.

Get it from your dealer. If he hasn't it we will deliver it. For prices address A. R. SAYLOR DRUG CO.

—o—

## GET A GOOD BONE CUTTER.

The relation of the bone cutter to egg getting is very close. Bone is a necessity for the laying hen. It furnishes the materials she must have to produce eggs. She cannot lay without these materials, and she does not get them in sufficient quantity in her ordinary daily rations.

This is particularly true of penned-up hens. The materials must be supplied. And there is no place where these materials can be procured so cheaply and so easily as from the green bones that ordinarily go to waste at the meat market and in practically every kitchen. These bones ought to be turned into money by first turning them into eggs. You would use the bones for that purpose instead of letting them go to waste if you were equipped to prepare them for the hens' use.

That brings us to the bone cutter. Get it, have it always ready and use it daily. Get a good one while you are about it—one that will not break, one that will handle all kinds of bone, one that you will find pleasure in using every day, because it will not wear you out in turning it.

The Standard Bone Cutter manufactured at Milford, Mass., is such a

## FOURTH ANNUAL EXHIBITION OF Jefferson County Poultry Association

**OCTOBER 28, to NOVEMBER 2, 1912**

\$650 cash specials open to the world. \$100, \$50 and \$25 for the 3 best and largest displays. \$50, \$25 and \$10 best largest display in each American, English and Med. Classes. COMPARISON SHOW.

For Premium List Address

**GEO. M. WELLS, Sec'y, : : Pine Bluff, Arkansas**

## S. C. RHODE ISLAND REDS

**PURE ARISTOCRATS**

The richest colored strain of Reds in the world, all points considered. I can say they have no superiors. Aristocrats swept Chicago. Send for 1912 catalogue showing photos of highest priced Reds in the world. Eggs balance of season, \$1.50 and \$2.50 per 15; \$10.00 per 100. Several of this year's breeders for sale. Am booking orders for guaranteed winners for the fall shows.

**WARNER LEWIS, Red Specialist, Como, Tenn.**

## COVERT'S S. C. BUFF ORPINGTONS

50 large cockerels fit to win in any show. Let me price you a cockerel to show or one that will improve your flock in the breeding pen next season. There is no breeder in this country, large or small, that can give you such high class BUFF ORPINGTONS as I can. Write soon and get the best.

**HARRY M. COVERT, Buff Specialist, : 2500 N. 13 1-2 St., Terre Haute, Ind**

## WHITE PLY. ROCKS S. C. WHITE LEGHORNS

Prize winners at all the leading shows. WHITE ROCK eggs, \$3.00 for 15; S. C. W. LEGHORN eggs, \$2.00 for 15.

**WM. H. BURCH, Box 850-H, : Charleston, S. C.**

## S. C. WHITE LEGHORNS

**FARM-BRED STRAIN**



Bred with inborn tendency to lay—long, deep bodies, low tails, pure white, healthy, vigorous. Bred and fed on scientific principles; reared under natural, congenial environments. Yearling Hens, Yearling Cocks, Cockerels and Pullets for sale.

**CHICK-A-DEE FARM, J. A. Dinwiddie, Prop., New Market, Tenn.**

## HOW

CAN you expect strength from weakness? Do you know that three-fourths of the eggs after moulting are too weak for incubation? Yes they are. Send two dollars for a Magic Egg Tester and see for yourself. Fully guaranteed. Satisfaction or money refunded. Buy of your dealer or from us by mail, post-paid.

**MAGIC EGG TESTER WORKS, Dept. GL. BUFFALO, N. Y.**

## R. C. R. I. REDS, WHITE INDIAN RUNNERS

Two cock birds and a few breeding hens for sale. Cheap to make room. Young exhibition and breeding stock after September 1st. Get our prices. We will please you.

**MRS H. R. NUSZ & SON.**

**BOX 301, CECILIAN, KENTUCKY.**

## SINGLE COMB RHODE ISLAND REDS

Line bred show birds ready for the show room, the very best blood lines in the United States represented. Fine breeders, both sex \$1.50 to \$7.50; fancy and extra fancy show birds, both sex, \$10.00 to \$50.00 each. We pay return charges. Satisfaction guaranteed. Reference M. & P. Bank

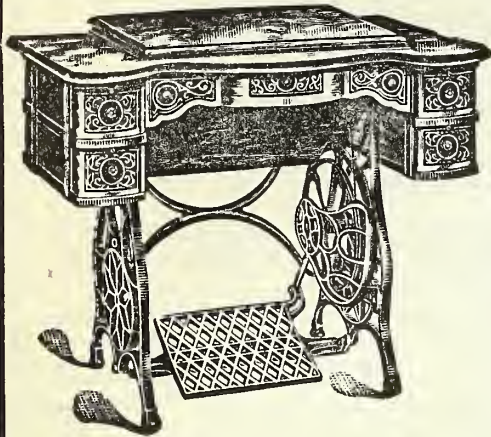
**APPALACHIAN POULTRY YARDS, A. J. Stanbery, Prop., R. 2, Newport, Tenn.**

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE INDUSTRIOUS HEN.



# \$16.00

## FREIGHT PREPAID



### Industrious Hen Sewing Machine

Made for this magazine under a special contract, and could not be bought in the regular market for less than \$50.00 now being offered to Industrious Hen subscribers at \$16.00, freight prepaid—barely above cost of manufacture.

#### Many Features of Merit

Noiseless, Easy Running, Ball-Bearing, Stand Handsomely Embossed, Hand Polished Case, The Wonderful Automatic Belt Replacer, High Arm, Lock Stitch Sewing Head, Automatic Bobbin Winder, Automatic Stitch Regulator. All Steel Working Parts Hardened in Oil, Nickel Plated Steel Attachments in velvet Lined Box.

**THE SEWING HEAD** has more improvements, conveniences and time and labor saving devices than any other sewing machine of like grade.

**THE CASE** is very attractive in appearance and substantial in construction.

**THE STAND** is ball-bearing—the bearings operating in micrometer ground hardened steel cones.

**ATTACHMENTS** are of the foot pattern and packed in velvet lined box.

#### Guaranteed For Ten Solid Years

Don't let the wily sewing machine agent induce you to part with forty-five or fifty dollars for a sewing machine which is in no way superior to the "Industrious Hen Machine." It is a well known fact that it doesn't cost any more to build an "agency" machine than it costs to pull up the high grade ten year warranted "Industrious Hen Machine," and that the bulk of the agent's excessive price pays for his commission and for the other heavy selling expense, including cost of keeping branch offices, maintenance of horses, wagons, etc., and the pay of collectors, drivers and teachers.

All this expense is eliminated by us in our offer to you of the **INDUSTRIOUS HEN SEWING MACHINE** at manufacturer's cost, plus a small commission for our trouble.

This high-grade family sewing machine, together with a year's paid up subscription to the "Industrious Hen" will be sent freight paid for \$16.00 cash to accompany order. Send check, postoffice order or registered letter to

**Industrious Hen Co.**  
Knoxville, — Tennessee

machine. It does not clog or break, turns easily and has become famous as the machine which cuts bones across the grain as well as with the grain. It is made in 12 sizes, and it has been greatly improved this year. The machine gives such certain satisfaction that the manufacturer, the Standard Bone Cutter Co., does not hesitate to send it out on free trial. If you need such a machine, you cannot do better than write the manufacturer about it. When writing about the cutter simply address the Standard Bone Cutter Co., Milford, Mass. Their booklet and full particulars will come on request, free.

#### NOTHING BUT FACTS.

J. A. Thornhill, Hartselle, Ala.

A system in poultry culture is of as much importance as the feed, and more than the breed.

Going at poultry raising in a haphazard, to-day on and tomorrow off way, is the wrong road to success.

Do you get just returns out of the feed fed poultry? If not, much of the fault lies with you. While the digestion of crude fiber isn't so thorough with poultry as other live stock, yet the digestion of grain is more thorough among poultry.

Does broiler and frier raising pay? If one is gifted with patience, has a knowledge of poultry feeding and has suitable equipment for the business some profit can be made; but there is more satisfaction in the egg end of poultry culture. After one masters the feed problem, the habits of the hen, the maintenance of health and vigor among the flock, the practical housing of stock and the how and when to market the product, nothing equals egg farming in pleasure and profit.

The many ailments to which poultry are heir, prevent to a certain extent people getting profitable returns out of them. It is an admitted fact that poultry which have been bodily affected with disease can never be made profitable, yet people will continue to keep and maintain such stock at the mercy and expense of more healthy and profitable specimens. Many times we hate to kill a bird because it cost a long price, and would be, if not infested with disease germs, a profitable breeder. But the longer such stock is kept, the less apt is one to gain their desired end.

The writer has never thought ill of breeding and raising fancy poultry, but unless one has ample means or has the experience, utility breeding will be found more profitable. Of course, where one doesn't make a hobby of "fancy" and breeds both utility and fancy into the same stock, well and good, but many times the best feathered hen will do the least towards filling the egg basket.

Now that fall has arrived, and the hens are finishing their molt, do not neglect to give them all the green food, a little meat food, plenty fresh cool water and all the wholesome food they need. Molting is very trying on poultry and unless one is particular, stock will get out of condition and before you are aware they have gone too far for your untimely attention.



## 50% Saved

By Getting a  
**STANDARD  
BUFFALO  
INCUBATOR**  
of CHAS. A. CYPHERS

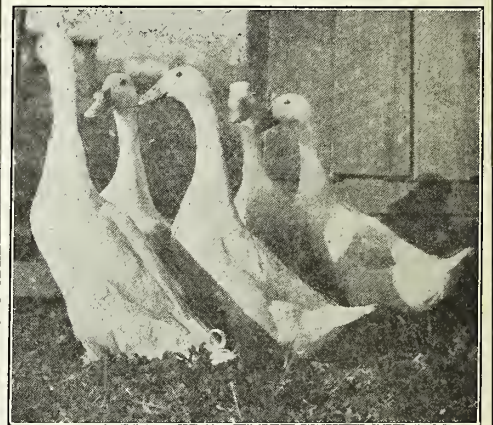
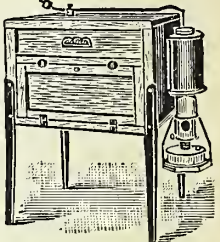
I am making the same high quality of machine as has always been associated with my name and selling it at about half the price always charged for models of my design. When you purchase the BUFFALO, you get the highest grade incubator manufactured. Write to-day for information about this money-saving, labor-saving incubator.

#### NOTE THE PRICES

50 to 60 egg size,	\$ 9.50
110 to 120 egg size,	12.00
220 to 240 egg size,	16.00
340 to 360 egg size,	20.00

#### BUFFALO INCUBATOR CO.

CHAS. A. CYPHERS,  
President  
476 Dewitt Street,  
BUFFALO, N. Y.



### HOBBS' IMPROVED WHITE I. R. DUCKS

The kind that are making from \$750.00 to \$2,000.00 per year on each trio invested in. A start of the best now means much. Shipped on approval. Catalog free.

OTIS K. HOBBS, State Secy., Hickory Grove, Ky.

### QUINTESENT ANCONAS

Winners at Madison Square, Philadelphia, Baltimore and elsewhere.

#### FINE SHOW BIRDS

In trios and pens—little feathered beauties well on their way. Sex guaranteed. Express prepaid on eggs. Safe delivery guaranteed.

H. E. PORTRUM  
ROGERSVILLE TENNESSEE

#### EATON'S FAMOUS POULTRY FOODS

Eaton's Life Saver Little Chick Food  
Eaton's Growing Ration  
Eaton's Climax Grain Mixture  
Eaton's Perfection Mash Mixture  
Eaton's High Grade Pigeon Food  
The Peerless Self-Feeding Dry Food Hopper  
R. D. EATON GRAIN & FEED CO.  
Dept. E. Norwich, N. Y.

Note raise in price of Standard of Perfection. Order through Industrious Hen.



For winter egg producers, hens must get the molt thoroughly finished and be able to start the winter in the best of condition.

While lice and mites multiply more rapidly during damp, warm weather, they live, thrive and multiply during all seasons of the year, and unless one is particular, they become so numerous as to make life among poultry miserable and very unprofitable. It is a very easy matter after one gets them under control to keep them so, but never allow yourself to conclude that a noninfested flock will not become infested without particular attention.

Low-priced poultry feeds are the costliest in the end, from the fact that they fail to carry in them the essential elements for eggs and meat production in proportion to what higher grade and costlier goods do. The grain dealers' profits are more on cheap feeds and often he will tell you that you get about as good results out of them as the best, but for best results the best is none too good.

Fresh air is the weapon to use to drive away disease germs. Fowls compelled to live in hermetically sealed houses cannot do well. A certain amount of air only carries so much oxygen and unless a fresh supply is continually being transmitted into the roosting rooms through proper ventilation, fowls soon use that which is available and are compelled to suffer and before one is aware, stock is out of condition, and no cause visible.

The scratching shed is a valuable annex to any poultry house, because it affords more fresh air, room and exercise.

Meat foods are the elements which take the place of animal protein in the way of bugs, worms, grasshoppers, etc., fowls find so easily during spring when any old hen will lay a few eggs; so in the winter egg business don't neglect to provide it. Some advocate green bones, others slugs of lean meat—any will do just so it is fresh and wholesome.

There is a constant demand for poultry for table use throughout the year. Some are killed before going to market, but the most of it is shipped in the live state. There are two methods of dressing market poultry, i. e., dry-picked and scalded. Of the two the dry-picked birds are the best and quickest sale. To dry-pick, kill the bird by using a killing knife, which is inserted into the brain through the cleft of the mouth and if rightly done and the fowl isn't allowed to wait too long before picking the feathers are easily removed. The best trade for dressed poultry is that built up among a class of people who are able to pay one for the extra trouble, but to get and maintain this class of trade, one must be able to keep the supply at the will of the customer. One of the easiest livings possible to be had is that gotten through a special egg and poultry trade and it carefully attended to.

Turn out all nesting material, spray with a good disinfectant, then put in some new hay, or excelsior, for by doing these things you will be helping the egg production and preventing possible diseases.

# Books for Poultrymen

For a year's subscription to THE INDUSTRIOUS HEN, add 25 cents to the price of any book listed below.

## 'Hen and Chicks,' or How to Make Money Raising Poultry

An all-round good book of information that is worth \$5.00 to any man in the poultry business. It gives facts and figures. No use experimenting all the time; profit by the other fellow's mistakes. Money returned if not pleased. 2d edition. 300 pages, 5½x7½, illustrated. Price 50 cents.

## Brigham's Progressive Poultry Culture

A book of instruction in modern scientific poultry culture. Used as a text book in the poultry department of a dozen or more agricultural colleges and schools. Nothing of value has been omitted and nothing useless has been included. Edited by Arthur A. Brigham, Ph.D. 287 pages. Price \$1.50.

## Rhode Island Reds

Origin and history of both the Rose and Single Comb varieties. How to mate for best results, by leading breeders of Rhode Island Reds. Edited by D. E. Hale, judge and breeder. Color plate of feathers by F. L. Sewell. 88 pages, 9x12, illustrated. Price 75 cents.

## The Plymouth Rocks

A complete text book devoted to America's most popular breed of standard fowls. Explains standard requirements, tells how to select the right breeders and how to mate them. Edited by Wm. C. Denny and J. H. Drevenstedt, breeders and judges of wide experience. Three color plates by Sewell. 160 pages, 9x12, illustrated. Price \$1.00.

## Artificial Incubating and Brooding

Solves all problems of artificial incubating and brooding. Tells how to obtain strong germed, fertile eggs, how to operate incubators and brooders, grow the greatest percentage of chickens, etc. 96 pages, 9x12, illustrated. Price 50 cents.

## Poultry Houses and Fixtures

Used as a text book at Cornell University. Shows plans of low cost, practical and labor-saving houses, designs for inside fixtures, roosting coops and coops for young chicks, and appliances for the poultry yard. 7th edition. 96 pages, 9x12, illustrated. Price 50 cents.

## The Bantam Fowl

Mr. T. F. McGrew, judge and breeder, tells how to house, feed and grow Bantams, how to treat diseases, how to select and fit for the show. 72 pages, 9x12, illustrated. Price 50 cents.

## The Chick Book

Guide to success in rearing chicks. Experienced poultry raisers furnish information on all problems connected with the breeding, rearing, developing and fattening of chicks. Article and chart on line breeding. The day-old chick business, etc. 1910 edition. 80 pages, 9x12, illustrated. Price 50 cents.

## The Wyandottes

A complete text book and instructive treatise. Tells how to select breeders and how to mate for best results. Care, feeding and management fully discussed. Edited by J. H. Drevenstedt, breeder and judge. Three color plates by F. L. Sewell. 160 pages, 9x12, illustrated. Price \$1.00.

## The Orpingtons

Gives origin and description of type of this popular breed. A chapter on the Black, Buff, White and Non-Standard varieties. The Orpingtons in the show room. Prominent breeders' opinion of them and a discussion of the breed as a utility fowl. Edited by J. H. Drevenstedt, breeder and judge. 80 pages, 9x12, illustrated. Price 75 cents.

## The Leghorns

Contains valuable information for breeders of any variety. Suitable for amateur and fancier. Articles by best breeders and judges. Color plates of S. C. White Leghorns and Brown Leghorn feathers by F. L. Sewell. 144 pages, 9x12, illustrated. Price \$1.00.

## Ducks and Geese

A complete guide to profitable Duck and Goose rearing. Articles by foremost breeders. Complete instructions on breeding, rearing, feeding, housing, marketing and exhibiting these profitable fowls. 80 pages, 9x12, illustrated. Price 75 cents.

## The Asiatics

Brahmas, Cochins and Langshans, contains information on mating, breeding, selecting, exhibiting and judging. This information is of value to every breeder of Asiatics who aspires to produce the best of birds. Color plates of Buff and Partridge Cochins by F. L. Sewell. 100 pages, 9x12, illustrated. Price 50 cents.

## Turkeys—Their Care and Management

Experiences of successful Turkey breeders, exhibitors and judges in mating, yarding, housing, hatching, rearing, marketing, exhibiting and judging Turkeys. For the fancier and the marketman. Color plate of Bronze Turkeys by F. L. Sewell. 96 pages, 9x12, illustrated. Price 75 cents.

## Eggs and Egg Farms

Is made up of articles by experienced breeders, giving methods of housing, breeding and feeding to increase egg production and make egg farming profitable. Article on pedigree breeding. 96 pages, illustrated, 9x12. Price 50 cents.

## Successful Poultry Keeping

A text book for the beginner and for all persons interested in better poultry and more of it. Contains the "secrets of success," both for pleasure and profit. New and valuable information on all branches of the poultry business. 160 pages, 9x12, illustrated. Price \$1.00.

SEND ALL ORDERS TO

THE INDUSTRIOUS HEN, Knoxville, Tenn.

# HEN & CHICKS

The best Poultry book ever published, and The Industrious Hen one year, 75c, or two years, \$1.00.



## CHICKEN-POX.

Chicken-pox is a very contagious disease. It is not usually fatal to adult fowls but is very destructive to the young and half-grown chickens. It usually appears like small warts on the comb around the beak, eyes and nostrils and sometimes under the wings of chickens. These wart-like nodules reach their full development in from five to ten days. They soon show a central depression, an opening forms or the scab is rubbed off by the bird's beak, after which there is a discharge of a watery, or later, a thick yellowish matter, which forms a crust.

Chicken-pox is a germ disease. It is said to enter by a slight puncture or wound or abrasion and many think that it is caused by the bite of a mite or flea, but it may be that the germ only enters through the puncture of the bite. Undoubtedly lice or mites carry the infection, and any abrasion gives entrance to the germ.

Chicken-pox when taken in time is not hard to cure. The treatment is designed to kill the germ and cure the wound. Carbolic salve, or carbo-

lated vaseline, or carbolic acid mixed with lard is about the best cure that we know of. Another treatment is to bathe the affected part with soap and water in order to soften the crusts, and afterward apply a solution of sulphate of copper (bluestone) a dram to half a pint of water. A little sulphur added to the mash is said to assist in the cure, but give only a little, as it opens the pores and the bird may take cold.

The local treatment should be accompanied by clearing and disinfecting the houses. The troughs and drinking fountains should be daily washed with boiling water.

When the disease first appears the affected birds should be at once isolated and treated and the houses and yards disinfected.

## THE OLDEST EGG.

Not so long ago a party of explorers, members of the Archaeological Society of Mayence, found, during their excavations in the ancient Moguntiacum, a hen's egg which was

estimated to have been buried for something like nineteen centuries.

Moguntiacum was built by Drusus, the son of the Roman Emperor Augustus, in the year 14 B. C. Upon the site of the ancient Roman castrum or encampment near the city the excavations in question brought to light many interesting relics including some water cisterns of Roman make. It was in one of these, which was located twenty feet below the ground that a damaged Roman clay-pot was found containing the shell of a broken egg and also a whole egg that had been kept from being smashed by a shard of the damaged pot, which covered it. The ancient egg was turned over to the municipal museum.—Harper's Weekly.

## SKIM MILK FOR YOUNG CHICKENS.

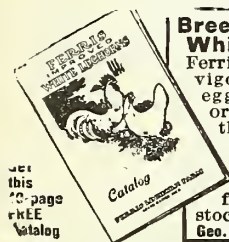
Skim milk is a farm product whose food value is not fully appreciated. It is not generally realized that milk loses little in actual food value by skimming. It is true that most of the fat is removed in the cream, but the most valuable food constituents—i. e., the nitrogenous substances—are left behind in the skim milk. Skim milk not only contains much nutritive material, but this material is in a form which is, as a rule, easily digested. It is not only healthful, nutritious food for man, but it may be fed to calves, pigs, and chickens with excellent results. Its composition is such that it may be substituted for part of the grain food, especially corn, of these animals with benefit and profit.

The Indiana Station has recently made some interesting experiments on the use of skim milk for young chickens. Two uniform lots (four to six weeks old) of 10 chickens each (5 Plymouth Rocks, 5 Houdans) were fed from July 11 to September 5, under identical conditions except that one lot received in addition to the food given the other all the skim milk they would drink. "Both lots were given all they would eat of a mixed food consisting of two parts crushed corn, one part bran, and one part ground oats. They were fed three times a day, except on Sundays, when an increased amount of food was given at the morning and evening meal. \* \* \* Both lots were also given all they would consume of cracked bone, cabbage, lettuce, and water of which no record was kept."

It was found that the lot receiving skim milk ate more of the mixed food and made a more rapid and satisfactory gain than the lot which did not receive skim milk. Milk-fed chickens made an average weekly gain of 4.46 ounces, those receiving no milk 2.62 ounces. The most rapid increase in weight occurred at those periods when the largest amounts of skim milk were consumed. The skim milk is considered "especially valuable as a food for young chickens during the hot dry weather and becomes of less importance as the chickens grow older and the weather becomes cooler."

The vessels in which the skim milk is fed should be scalded frequently to keep them clean and wholesome.

If your chickens need charcoal, burn corn for them.



## Breed Ferris Improved White Leghorns and Make More Money

Ferris Leghorns are the best layers in the world. Size, health, vigor and profit are bred in the bone. Scientifically bred for eggs for 10 years and will lay 175 eggs or more a year with ordinary care. Thousands of satisfied customers all over the world. We can prove that they will pay you best.

## SATISFACTION OR YOUR MONEY BACK

Our guarantee is the most liberal ever given by any breeder. You must be perfectly satisfied before sale is considered closed. Write for catalog giving list of winnings at largest shows. Describes stock, farm, methods and gives prices. Send postal today. Address Geo. B. Ferris, The Ferris Leghorn Farm, 920 Union Ave., Grand Rapids, Michigan



Will Win Anywhere

5000 Birds like this at Low Prices

## "BLUE-BAR"

## Barred Plymouth Rocks

All trained and conditioned for the fall fairs and poultry shows—Cocks, Cockerels, Hens or Pullets. Why send your money to Northern breeders when you can get as good birds at home for less money and subject to your approval, too? My "Blue Bars" won ninety-one ribbons and specials in 1911, again stamping them as the leading strain of the South. They win for me, why not for you? Send for catalogue.

**L. H. READE, Highland Park Richmond, Va.**

## MOTTLED ANCONAS

Superior type of birds. Prepare for the fall and winter shows. Tell us how much you have to invest and we will do the rest. Extra fine utility stock. Settings in season.

**COLE & GEORGE : Atlanta, Georgia**  
MEMBERS INTERNATIONAL ANCONA CLUB.

## S. C. BROWN LEGHORNS

Nothing except birds of quality that stand the tests of competition are bred from Phenomenal layers at all seasons. Old and young stock for sale. Exhibition birds and excellent breeders at moderate prices. Cockerels at all prices for sale. I always guarantee stock as represented and satisfaction. Send for mating list.

**H. C. ADAMS : : Lynchburg, Virginia**

## THE "PAT" EGG STAMP

Air cushion; the most perfect printing device ever produced for the purpose. Prints beautifully on any part of any sized or shaped egg.

Stamp, Ready for Use, Including Inked Pad, Price, Postpaid, \$1.00.

**S. B. NEWMAN & CO. : : 617 Gay St., Knoxville, Tenn.**



# HEN and CHICKS

## OR HOW TO MAKE MONEY RAISING POULTRY

**MOST TALKED OF POULTRY BOOK PUBLISHED.** It is thoroughly practical. Articles written from actual experience. There is nothing technical about it. Nothing hard to understand. Just the sort of information that one practical poultryman would give another. No use experimenting all the time. Profit by the other fellow's experience. It is not necessary to describe this new and valuable book here. Everybody that gets it endorses it. Read every word our friends say about it, and they will tell you in their own language, better than we could, just what the book is. We will say this, however: Send fifty cents for the book, and if you are not more than pleased with it, we will return your money. Read every one of these testimonials from some of the best known poultrymen in the country. Send orders to

SEND 75 CENTS AND THE INDUSTRIOUS HEN WILL ALSO BE SENT FOR ONE YEAR.

THE INDUSTRIOUS HEN COMPANY, Knoxville, Tenn.

*The Industrious Hen Co., Knoxville, Tenn.:*

"HEN AND CHICKS has more good, common sense in it than many of the books on the market, and is well worth the price asked. For the beginner it is an excellent guide."—*Michael K. Boyer*, Hammon, N. J.

*The Industrious Hen Co., Knoxville, Tenn.:*

"I received a copy of HEN AND CHICKS and am well pleased with it. It is worth more than the price asked for it."—*Geo. M. Wells*, Pine Bluff, Ark.

*The Industrious Hen Co., Knoxville, Tenn.:*

"I have just received your book, HEN AND CHICKS, and think it is the best book in print for beginners in poultry keeping. I have looked over it and it is selected stuff, so arranged that you can find what you want without looking over so much territory."—*C. E. Pittman*, Commerce, Ga.

*The Industrious Hen Co., Knoxville, Tenn.:*

"Have only had a chance to glance through HEN AND CHICKS, as a visiting friend who was leaving the city wanted the copy, therefore we are without one. We are enclosing the price for another, which we hope you can send at once. We think the book very valuable for both beginners and experienced breeders, and heartily recommend it. Could easily sell several copies, and would be glad to accommodate you and our friends."—*J. P. Swift & Son*, Waynesville, N. C.

*The Industrious Hen Co., Knoxville, Tenn.:*

"I can heartily commend your book as an encyclopedia of the poultry business, and is worth many times more than the price you ask for it."—*F. H. Tecktonius*, Racine, Wis.

*The Industrious Hen Co., Knoxville, Tenn.:*

"I can frankly say that it is the best book of its kind that I ever saw. Have seen books that sold at \$1.00 and \$1.50 that could not compare with it. It will take with anyone who desires good, simple, honest facts."—*P. H. Weikal*, Marion, Ind.

*The Industrious Hen Co., Knoxville, Tenn.:*

"I have carefully sketched over every piece in the book, and unhesitatingly say it is full of good things from start to finish, and will be of great benefit to poultry breeders, and most especially to those who are just starting. Most of the articles being from the pens of breeders who wrote them from personal experience is of very much more value. It is full and complete and well arranged, and full of good advice to beginners, where many mistakes are made in the poultry business."—*C. H. Dozier*, Marion, Ala.

*The Industrious Hen Co., Knoxville, Tenn.:*

"A person can be guided by the information found in HEN AND CHICKS and make a complete success of poultry raising. I feel safe in saying that no one who gets a copy will ever want to part with it unless they are sure of getting another one."—*J. A. Thornhill*, Hartselle, Ala.

*The Industrious Hen Co., Knoxville, Tenn.:*

"It's the best thing of the kind I have ever seen, and I am sure that it should be in the hands of every poultry raiser. I am requesting all my friends and customers to send for a copy. I am sure you will soon have a great demand for the book."—*H. B. Lansden*, Manchester, Tenn.

*The Industrious Hen Co., Knoxville, Tenn.:*

"I find HEN AND CHICKS one of the best text books on How to Make Money Raising Poultry I ever saw. I paid \$1.00 for a book on poultry not nearly so good. I don't see how you can afford to sell such a book for only 50c. The book is well worth \$5.00 to anyone interested in poultry keeping. I find it contains everything anyone wishes to know about poultry."—*J. C. Clipp*, Saltillo, Ind.

*The Industrious Hen Co., Knoxville, Tenn.:*

"HEN AND CHICKS is indeed a most creditable compilation of subject matter, which cannot fail to be helpful to poultry raisers in a multitude of ways. As to the price of the book—well, when a book, such as HEN AND CHICKS, of 300 pages, and rich with illustrations, can be obtained for 50c, a purchaser has practically made himself the recipient of a gift."—*B. F. Hunter*, Paris, Tenn.

*The Industrious Hen Co., Knoxville, Tenn.:*

"HEN AND CHICKS starts off all right on page one by admonishing the poultryman to study and understand his business, and then proceeds to instruct him in a manner that will enable him to conduct a profitable poultry business. The correct diagnosis and practicable remedy prescribed for cholera alone is worth the price of the book. The article on caring for little chicks, as well as the 179 other articles, all to the point, while we may not agree with every theory and practice advocated in its pages, it is what the name indicates, and as THE INDUSTRIOUS HEN lays all over the South, HEN AND CHICKS may soon be scratching in every nook and corner of the Sunny South."—*Milton Doss*, Kimberly, Ala.

*The Industrious Hen Co., Knoxville, Tenn.:*

"Today I received a copy of HEN AND CHICKS, or How to Make Money Raising Poultry, and am highly pleased with it. Being made up of carefully selected articles from THE INDUSTRIOUS HEN, it covers a wide field of poultry theory and practice, and cannot be but very helpful to any poultryman. By choosing from a great variety of writers, the subject is presented from every point of view. The reader can't do better than to send 50c and secure a beautifully illustrated copy of more than 300 pages."—*T. C. Karns*, Powell Station, Tenn.

*The Industrious Hen Co., Knoxville, Tenn.:*

"HEN AND CHICKS has afforded me a great deal of pleasure—I have gotten lots of good things out of it. You certainly have volumes boiled down to a small space, and without an exception it is the best book I have ever seen on poultry. It treats all sides in a business and condensed form. It is worth many times the price you ask for it to any man who expects to raise fancy or utility poultry."—*J. C. Vaughan*, Lebanon, Tenn.

*The Industrious Hen Co., Knoxville, Tenn.:*

"I received the book, HEN AND CHICKS, today, and have taken some time to look it over carefully. I am certainly well pleased with it, as it treats of the money making side of the poultry business fully, yet in such a concise and truthful manner that with the help of the splendid index no one need have any trouble in finding just what information they may wish. I believe that this book is worth much more than the price you are asking for it. HEN AND CHICKS is one of the best books I have read on How to Make Money Raising Poultry."—*Lloyd C. Mishler*, North Manchester, Ind.

*The Industrious Hen Co., Knoxville, Tenn.:*

"I have examined your book, HEN AND CHICKS, and pronounce it a book of great value to the poultryman. It covers about every subject connected with the poultry business. Especially would I commend it to the beginner. Many people work in the dark for years for want of the information which your book contains."—*V. H. Council*, Warrenton, Va.

*The Industrious Hen Co., Knoxville, Tenn.:*

"Copy of HEN AND CHICKS received a few days ago. It is one of the best 50c books on poultry I ever saw; in fact the best. The illustrations alone are worth \$1.00 to any amateur in the business, and to every breeder who has chronic kickers and know-it-alls. Mr. Dozier's article on 'Facts Learned by Experience' is worth more than \$1.00 to give them. It will, in most cases, prove valuable. In fact, the work is worth dollars to every poultryman, and your price of 50c should place it in their hands at once. Not one page of its 280 is amiss, and in type matter and illustrations it is most creditable to the editor and publisher. To prove my earnestness in the matter, I am enclosing list of names who have ordered copies from me. You may send me the bill."—*O. F. Sampson*, Youngs, N. Y.



# S. C. WHITE LECHORNS

EXCLUSIVELY

"That's My Business."

The finest laying strain on the South Atlantic Coast. I guarantee pure white plumage, good head points and low, full tails, and full compliance with Standard requirements. I have been perfecting this heavy laying strain for eight years.

HAYDEN CLEMENT

Box 246

Salisbury, N. C.

## BREEDERS' CARDS

CLASSIFIED ADVERTISING RATE, 2 cents per word, flat, subject to a discount of 10 per cent on yearly contracts amounting to \$6.00 or more. Ads in this department must be paid for in advance.

### ANCONAS.

PORTER'S POPULAR BLUEBELL ANCONAS.—Some bargains in good stuff to make room. Write your wants now. Conaville, Mallet Creek, Ohio. 102

SHEPPARD'S FAMOUS ANCONAS.—The world's best. First at world's greatest shows including London, England, Madison Square and Cleveland. Greatest egg record—256 average. Catalogue free. Cecil Sheppard, Berea, Ohio. 105

### ANDALUSIANS.

BLUE ANDALUSIANS, White Faced Black Spanish and Silver Spangled Hamburgs, finest strains. All first prize winners at Tennessee State Fair, 1910-11. Eggs, \$1.50 per 15. H. R. Birchett, Lebanon, Tenn. 104

BLUE ANDALUSIANS and White Faced Black Spanish stand in a class by themselves as egg producers. We sell eggs from high-class birds. 15 eggs for \$1.65, 30 eggs for \$3.00. Avoid rush by sending order early. A. N. Brown, Woodbury, Tenn. 104

### BANTAMS.

BANTAMS—Buff and Black Cochins, and Golden Sebrights. 58 ribbons on 64 entries, Nashville, Memphis, Knoxville, Birmingham, Atlanta, 1911. Eggs, \$2.00 per 13. Lewis Culps, 422 Spofford Ave., Pulaski, Tenn. 100

RARE BARGAINS—Golden and Silver Sebright, Buff, Black, White and Partridge Cochins, Rose Comb Black, Light Brahma, Black Tailed Japanese, Red Pyle and Black Red Game and Single Comb White Leghorn Bantams. 1,000 birds. Proper & Son, Schorharie, N. Y. 110

### BUTTERCUPS.

SICILIAN BUTTERCUPS.—The best laying breed. Eggs for hatching from selected birds. Stock for sale. Arden Poultry Yards, Arden, N. C. 103

### DUCKS AND GEESE

JOIN NATIONAL White Runner Duck Club. J. A. Earl, Pres., Kirkwood, Atlanta, Ga. 103

FOR SALE OR WILL EXCHANGE for Indian Runner Ducks. 100 Barred Plymouth Rock chickens. Columbia Poultry Farm Magnolia, Ark. 101

WHITE INDIAN RUNNERS.—Same stock as Chicago blue ribbon winners. Heavy layers. White eggs. Stock for sale at right prices. Mrs. Claire McGlumphy, Salem, Ill. 101

INDIAN RUNNER DUCKS for sale of my great laying strain. Prices low, quality high, satisfaction guaranteed. Frank Seagle, Prop. Valley View Poultry Farm, Morristown, Tenn., Route 1. 101

INDIAN RUNNERS—Exhibition and utility stock. English imported. Pure white eggs. Lay each day except at moulting. \$1.00, \$2.00, \$3.00 and \$5.00 per dozen. A. P. Burk, Camp Chase, Ohio. 103

WHITE INDIAN RUNNER DUCKS. Gold mine of all fowl. Great layers. White as snow. Bred absolutely true to color. Large, pure white eggs. Mature early. I have one of the finest flocks from choicest original Spencer strain (originated in California). Eleven prize winners at 1912 Los Angeles show, from "blue" ribbon winners for years. Choice breeding trios, \$25. Exhibition birds. Young stock. Eggs, \$5.00 dozen; \$25.00 hundred. C. B. Kirkpatrick, Rural Route 4, Box 257, Los Angeles, Cal.

### GAMES.

MY WHITE INDIAN GAMES (White Cornish) are wonderful egg machines, and rapid-growing meat makers that win in every show they enter. Eggs \$1.50 and \$3.00. Birds \$2.00 to \$5.00. M. E. Kennedy, Temple, Ga. 106

### LANGSHANS.

BLACK LANGSHAN SHOW BIRDS.—I exhibited birds last season in four states, winning four-fifths from my competitors. Stock for sale. James R. Brown, Sweetwater, Tenn. 101

### LEGHORNS.

FOR SALE.—Early hatched Single Comb White Leghorn Pullets—Wyckoff Strain. Ed. Wenkhous, Manassas, Va. 101

SINGLE COMB BLACK LEGHORNS—Grand stock at \$6.00 per trio. Reduction on larger lots. Eggs now \$3.75 per 100. Circular free. The Van Driest Farms, Cedar Grove, Wis. 104

### MINORCAS.

SINGLE COMB WHITE MINORCAS—Big bargains in stock that were bred from prize winners. Bert Staley, Martinsville, Indiana. 102

### ORPINGTONS.

WHITE ORPINGTONS (Cook Strain). Prize winners. Eggs, \$5.00 and \$10.00 per 15. Stock for sale. H. A. Black, Cartersville, Ga. 104

MODEL STRAIN S. C. Buff Orpington and Indian Runners. Some choice stock for sale. Eggs in season. Satisfaction guaranteed. Write us. Model Poultry Farm, Gurley, Ala. 103

KELLERSTRASS CRYSTAL WHITE Orpingtons—Am offering a limited number of cockerels hatched from exhibition pen, birds scoring 95 to 95 3-4. Write for my prices. Member White Orpington Club. Myra White, Blackstone, Va. 101

### PLYMOUTH ROCKS.

PARTRIDGE PLYMOUTH ROCKS.—The beauty breed. Great layers, quick growers, fine table fowls. Stock for sale reasonable. W. T. Bull, Box 29, Greenville, S. C. 102

400 HIGH-CLASS White Plymouth Rock cockerels, bred from prize winning stock, at \$2, \$3, and \$5 each. Descriptive circular free. Philip Condon, R. 35, West Chester, Ohio. 105

"RAINBOW" PARTRIDGE ROCKS.—Get our sales list of ribbon winners at Cleveland, Milan, Norwalk, and Ohio-Columbus Centennial Exhibition. The Rockwood Farm, Box T, Norwalk, Ohio. 102

BARRED ROCK BREEDERS—Learn more about the variety. Send 50c for National Barred Rock Journal one year. Only monthly magazine in the world devoted exclusively to the Grand Old Breed. Sample 5c. Send today, don't miss it. W. L. Robinson, Pub., Union City, Mich. 103

LOYD'S PRIZE WINNING PARTRIDGE Plymouth Rocks. The blue ribbon kind. Stock for sale at right prices. Twelve hundred head to select from. Satisfaction guaranteed. Catalog free. C. J. Loyd & Son, Greensburg, Ind. 106

DO YOU KNOW THE VALUE of one high-grade hen in improving your flock? Perhaps I can tell you something new. If interested in White Rocks, drop me a card now. J. W. Morse, Marissa, Ill. 103

### RHODE ISLAND REDS.

S. C. R. I. REDS and Barred Plymouth Rocks—Best of stock. Eggs, \$1.50 per sitting. A. S. Bell, Knoxville, Tenn. R. F. D. 10

A BIG BARGAIN IN ROSE AND SINGLE COMB REDS.—I am now offering my one year old hens and cocks from my best breeding pens the past season. These birds cost from \$10 to \$25 each, and in order to close them out quickly, I will sell them from \$3 to \$10 each, according to quality. This is an opportunity rarely offered. I also have the best young stock I have ever raised one who wishes to get birds for some of the and will be glad to take orders from any the early shows. My young stock was bred from birds that won the Blue Ribbon at the South's leading shows in 1911. I also offer four one year old Black Orpington hens—"Cooks Strain"—and a year old cock which I will sell for \$15.00. Barrett Phinizy, Athens, Ga. 100tf

### WYANDOTTES.

FOR SALE AT A BARGAIN.—Fine prize winning White Wyandotte pen. Mrs. E. H. Saunders, Topside, R. 3, Knoxville, Tenn. 101

### SEVERAL VARIETIES.

FOR SALE—Eggs from Fishel and Rudy White Wyandottes; S. C. Black Minorcas, Pape strain. All magnificent birds. Mating list. C. B. Martin, Greenville, S. C. 94tf

FOR SALE.—Barred Plymouth Rock, White Leghorn cockerels; Indian Runner Drakes. Eggs of the above varieties of fowls in season. Also Mammoth Bronze Turkey eggs. L. Peck, Route 1, Madisonville, Tenn. 104

BARGAIN SALE.—My fine flock White Leghorns, half my beautiful White Orpingtons, half my breeders, Indian Runner ducks. I am over-stocked. Write for bargain list 69. Woman's College, Meridian, Miss. 101

### PIGEONS.

PIGEONS—CARNEAUX AND BIG CROSSES. Guaranteed mated. Prices right. Sidney Johnson, Boynton, Va. 102

MATED CARNEAUX AND HOMERS—Yards are too crowded. Mated Carneau, \$2.00 pair; Mated Homers, 90 cents pair, not less than 3 pair at these prices. Number banded and mating guaranteed. Geo. A. Collins, 511 Luttrell St., Knoxville, Tenn. 101

### MISCELLANEOUS.

PRINTING for poultrymen; fine cuts used, samples free; mention your breed. W. A. Bode, Fairhaven, Pa. 102

WOOLLEY, THE TAR HEEL WITH a square deal, Route 4, Charlotte, N. C., breeds Buff Leghorns and White Rocks, Catalogue free. 102

PRINTING FOR POULTRYMEN.—Best cuts used, any breed. Quality highest, prices low. Member A. P. A. By parcels post after Jan. 1. Write E. H. DePoy, VanBuren, Ind.

BULLETIN ON "BALANCED RATION" absolutely free; tells how to compound at home most economical and healthful mash, chick foods, scratch foods. Drop postal giving your dealer's name and address to Henola Food Co., Box A-8, Newark, N. J. 106

PRINTING FOR POULTRYMEN, Stockmen, Everybody. Noteheads, envelopes, cards, tags, labels, 500 either, \$1.25; 1000, \$2.00 postpaid. 150 noteheads and 150 envelopes \$1.00 postpaid. Postcards, Linen-finish letterheads, elegant catalogues, also circulars. Stamp brings samples. Model Printing Company, Manchester, Iowa, Eleventh Ave. 108

The Industrious Hen can supply you with any Poultry Book published.